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Desert Harvest Solar Project

Final Environmental Impact Statement
and
Proposed California Desert Conservation Area Plan Amendment

Volume 5 - Appendices H through N

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Cover Photo: View of the solar facility site from Kaiser Road

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Appendix H

Traffic Impact Study

TRAFFIC STUDY
FOR
Desert Harvest Solar Project

Desert Center, California

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I. Introduction

A. Purpose of the TIA and Study Objectives

This analysis was prepared to identify traffic impacts and, if needed, propose mitigation of impacts, due to the construction of the Desert Harvest Solar Project (Project) proposed by enXco Development Corporation (enXco or Applicant). The Project includes a solar farm producing up to 150 MW of electrical power and the transmission line to carry the power to the soon to be constructed Red Bluff Substation. The Project will be located north of Desert Center in the unincorporated area of Riverside County[i].

This traffic study was completed with generally accepted procedures and reflects the opinions of Hernandez, Kroone & Associates (HKA). The methods used were based on the Highway Capacity Manual. The traffic study follows the outline in the Riverside County Transportation Department "Traffic Impact Analysis Preparation Guide", dated April 2008.

Measure of Impacts - The existing condition and the future conditions without project traffic is the yardstick to determine the magnitude of the project and its traffic impacts. The operation of the traffic without the project is compared to the operation of the traffic with the project. The measure used to compare the operation of the intersections or roads is called Level of Service.

Level of Service (LOS) is a measure of the effectiveness of an intersection or road. It rates intersections by the length of delay or road segments by a volume to capacity ratio.

A LOS of A means that the intersection has little delay. A LOS of F means the intersection has delays of over a minute. The magnitude of change in the LOS when the project trips are added to the intersection indicates the magnitude of the project's impact.

The LOS measure of effectiveness for a road is based on the ratio of the volume of traffic using the road segments to the capacity of the road segments. The traffic on a road operating at LOS A would move freely. The traffic on a road operating at LOS F would be traveling significantly less than the posted speed limit in stop / go congestions.

Appendix A has tables showing the ranges of delay for intersections and the volume to capacity (v/c) ratios for road segments for the various LOS categories.

In the County of Riverside, if the LOS decreases to below an LOS of C with the addition of the traffic generated by the proposed project (project traffic), it is considered to have an impact and mitigation may be required. Intersections under joint jurisdiction with Caltrans may operate at an LOS of E.

Intersections or road segments are selected for analysis based on the project traffic distribution anticipated. The study intersections were analyzed for delay and level of service (LOS) using HCS on the unsignalized intersections. The HCS software uses the Highway Capacity Manual 2000 methodology (HCM) for solving for LOS and delay.

The HCM analysis procedures include mathematically applied adjustment factors as part of the process in calculating the final LOS rating of an intersection. One of these adjustment factors is called the peak hour factor (PHF). This helps factor in the differences between an hourly volume and variations in minute increments within an hour. The PHF is defined by the *Highway Capacity Manual* as "...the ratio of total hourly volume to the peak rate of flow within the hour..." The traffic volume is divided by the PHF to adjust it to the maximum flow through the intersection.

HKA would like to acknowledge enXco Development Corporation and Aspen Environmental Group who provided several of the attached figures.

B. Site Location and Study Area (See Figure 1, AKA Draft Administrative EIS Figure 2-1)

The Project will be located near Desert Center, California, in the eastern portion of Riverside County, near the Joshua Tree National Park. The nearest communities are Eagle Mountain, Lake Tamarisk, and Desert Center. The solar panels will be constructed and operated at the "solar farm", approximately 5 miles north of Interstate 10 (I-10) along Kaiser Road. The Bureau of Land Management (BLM) administers the majority of the land in the area.

The State Route 177 / I-10 interchange is the nearest interchange. The interchange is approximately 50 miles east of Indio, California and 50 miles west of Blythe, California.

C. Development Project Identification - Riverside County Case Number and Related Cases

Not Applicable

D. Development Project Description

1) Project Size and Description (See Figure 2, AKA Draft Administrative EIS Figure 2-2)

The several alternatives to the projects are listed in Table 1.

Table 1: Desert Harvest Solar Project Alternatives

Alternative:	Brief Description:
1	No Action (No Plan Amendment)
2	No Development Action (with Plan amendment)
3	Proposed Solar Project – 150 MW Facility
4	Solar Project Excluding Palen-Ford Wildlife Habitat Management Area
5	Reduced Footprint Solar Project
A	No Gen-Tie
B	Proposed Gen-Tie (Shared Towers)
C	Separate Transmission Towers within same Right-of-Way
D	Cross-Valley Alignment for Gen-Tie
E	New Cross-Valley Alignment for Gen-Tie

This traffic study analyzed the traffic impacts of Alternative 3 Proposed Solar Project. This alternative is the most likely to be completed. It is also the largest acreage of solar facilities and will require the largest construction crew and probably create the most traffic impacts.

In order to demonstrate the traffic impacts of Alternative 3, traffic impacts of the existing or "No Action" Alternative will be developed. The difference in the traffic impacts between the "No Action" and "Proposed Solar Project" alternatives are the traffic impacts due to the project.

The components of Alternative 3 Proposed Solar Project are as described as: "… a 150 MW nominal capacity, alternating current (AC) solar photovoltaic (PV) energy-generating project. The project would consist of a main generation area, operations and maintenance (O&M) facility (either on or off site), on-site substation, switchyard, and site security. The project would be located on lands administered by the BLM, Palm Springs-South Coast Field Office in Riverside County, approximately 5 miles north of Desert Center. The project would be located on 1,208 acres, and would be comprised of two separate parcels separated by a desert wash. The northern parcel consists of 1,053 acres and the southern parcel consists of 155 acres."[ii]

Construction facilities will include PV arrays, switchyard, inverters, overhead lines, access corridors (maintenance roads), and on-site substation. The O&M facility may be built on site or it may be a remodel facility that is within 10 miles of the solar project. Site security includes a guard building, fencing and lighting.

The solar project will have little manpower requirements once it is constructed and connected. The O&M Facility will be manned during operation of the Project. The guard shack will be manned 24 hours a day during the construction and operation of the Solar Farm.

It is anticipated that approximately 10 people will arrive and leave the site daily for operation and maintenance. The majority of the staff will be at the site during daylight hours but occasionally testing or maintenance work will require night work.

It is assumed that 10 people will arrive and leave the site daily for guard duty. Their shifts are assumed to be 12 hours long, with 5 working each shift.

Analysis of the traffic impacts of the Gen-tie Line Alternatives was not part of this traffic study. The following paragraph is being included as information.

A transmission line (Gen-Tie Line) will be needed to transport the power generated by the Desert Harvest Solar Project to the Red Bluff Substation near the I-10. There are several alternatives for the routing of this above ground transmission line. Four alternatives are proposed and shown on exhibits in Appendix A. Two of the alternatives will use the same right-of-way that will be used by the Desert Sunlight Solar Farm. Alternative B has the two solar facilities sharing the same towers.

The Red Bluff Substation was not part of the Desert Harvest Solar Project. Its traffic impacts were not analyzed in this traffic study, but it is being built in this area. The following paragraph is included for information.

The Red Bluff Substation is being construction by Southern California Edison (SCE) near the I-10. It will connect the Gen-Tie transmission line from the Desert Sunlight Solar Farm and the Desert Harvest Solar Project to the existing Devers-Palo Verde (DSPV) transmission line. Its components include:

- Red Bluff Substation: 500/220 kV substation on approximately 90 acres
- Transmission Lines: Approximately 2,000 feet of new transmission lines (two lines of approximately 1,000 feet each), to connect to the existing DSPV transmission line
- Generation Tie Line Connection: Connect the TRANSMISSION LINE to the Red Bluff Substation
- Modification of existing 220 kV structures
- Distribution Line for Substation Light and Power: Approximately 300 feet of 12 kV overhead distribution line and approximately 1,000 feet of underground distribution line (to provide substation light and power)
- Telecommunications Facilities: Install optical ground wire (OPGW) on the DSPV interconnection generation tie-line

2) Existing Land Use and Zoning

The Project will be located on land within the BLM's charge. The land use is open space. The Desert Center Area Land Use map from the County of Riverside General Plan is included in Appendix A.

3) Proposed Land Use and Zoning

No zoning changes are proposed by the Project's Plan of Development (POD). Renewable energy generation or transmission facilities are not expressly allowed nor prohibited under the zoning ordinances but permitting may be required by County of Riverside for the use of private property in this manner.

The Project component will require buildings, fencing and arrays on approximately 1,200 acres of BLM land.

4) Site Plan of Proposed Project (reduced) Figure 2

5) Proposed Project Opening Year – 2014

6) Any Proposed Project Phasing – No project phasing is planned but the construction work will be so that limited areas of soil will be disturbed at a time.

7) Indicate if Project is within a City Sphere of Influence –

The project is not within the sphere of influence of any city.

II. Area Conditions

A. Identify Study Area and Intersections (Figures 3 and 4)

Access to the Project is provided by Kaiser Road, a major road with 118 feet of right of way. It is predominately a north-south paved road that ends at State Route 177 (SR-177) at the south and at Eagle Mountain Landfill at the north end. It is one lane in each direction. It is mostly traveled by local residents. During a two hour period on a typical weekday, HKA observed three vehicles on the road north of its intersection with SR-177.

SR-177 is predominantly a north-south road that provides access for Kaiser Road from the I-10. According to the Desert Center Area Plan by the County of Riverside, it is a Mountain Arterial with 110 feet of right of way.[iii] It connects I-10 to SR 62, another east-west route in eastern Riverside County, approximately 30 miles north of Desert Center. SR-177 is one lane in each direction with centerline and edge of pavement markings.

The I-10 is an east-west interstate starting in Santa Monica, CA and ending in Florida. At this location it is two lanes in each direction.

There is an east-west road named Ragsdale Road between the I-10 and the SR-177 / Kaiser Road intersection that was not studied or counted. At the time the background counts were taken, the road appeared be a frontage road between the Eagle Mountain / I-10 interchange and the SR-177 / I-10 interchange. It dead ends east of the SR-177.

Intersections were selected based on project trips, proposed distribution and the anticipated use of the SR-177 interchange to reach the Project site.

Intersections to be analyzed are:

- SR-177 / I-10 EB Ramp
- SR-177 / 1-10 WB Ramp
- SR-177 / Kaiser Road

B. Existing Traffic Controls and Intersection Geometrics (Figure 5)

SR-177 is the main road and is not stop controlled. The intersecting roads with SR-177 are stop controlled. The geometrics of the intersections are shown in Figure 5 and in Table 2.

Table 2: Existing Geometrics

Intersections	NB			SB			EB			WB		
	L	T	R	L	T	R	L	T	R	L	T	R
SR-177 / I-10 EB Ramp	-	1	S	S	1	-	1	1	Y	-	-	-
SR-177 / I-10 WB Ramp	S	1	-	-	1	S	-	-		S	1	S
SR-177 / Kaiser Road	S	1	-	-	1	S	S	-	S	-	-	-

S – Turning Movement is shared with adjacent movement.
Y – Turning movement must yield but is not stopped controlled. Has a separate lane.

C. Existing Traffic Volumes - AM and PM Peak Hour Turning Movements and Roadway Links) (Figure 6A - AM and Figure 6B - PM)

Turning movement counts and a 24 hour classification count were taken by Counts Unlimited (See Appendix B) on November 22, 2011. Only 119 vehicles used Kaiser Road north of Lake Tamarisk Resort during the 24 hour period counted.

The volumes shown on Figures 6A and 6B are in passenger car equivalents (PCEs). Large trucks move through surface streets and intersections more slowly than cars and take more time to move through intersections. Since the analysis procedures are based on the number of passenger cars, the trucks must be converted to an equivalent number of cars. The existing truck trips were converted to passenger car equivalents (PCEs) by using the following factors:

Classification	Passenger Car Equivalents
Cars	1
Large 2-axle Vehicles	1.5
3-axle Vehicles	2
4 or more axle Vehicles	3

The calculations of the PCEs are included in Appendix B.

Data on the volume of the I-10 in the project area was obtained from the Caltrans 2010 Annual Average Day Traffic Data (Appendix A). The peak hour volume on the I-10 near the SR-177 interchange is in the 2,500 to 2,700 range.

D. Existing Delay and Level of Service (LOS) at Study Intersections / Roadway Links

Using the existing peak hour volumes and geometrics, the following LOS resulted at the study intersections. The detailed printouts are in Appendix C.

Table 3: LOS Summary for Existing Conditions and Traffic Volumes

Intersection	Control	AM Peak Period		PM Peak Period	
		Delay, sec	LOS	Delay, sec	LOS
SR-177 / I-10 EB	EB Off Ramp Stops	9.0	A	9.3	A
SR-177 / I-10 WB	WB Off Ramp Stops	9.1	A	9.7	A
SR-177 / Kaiser RD	SB Kaiser RD Stops	8.5	A	8.8	A

Since SR-177 is not controlled, traffic movements on SR-177 will maintain an LOS A. The movements of concern are those at the stop-controlled approach, as they must yield to the traffic on SR-177. Furthermore adequate gaps in the traffic stream or queues need to be available to left and right turning vehicles as shown above. The existing traffic volumes operate at an acceptable LOS in both the AM and PM Peak Periods.

E. Provide Copy of General Plan Circulation Element in the Project Vicinity *(Figure 7)*

F. Indicate if Transit Service is Available in the Area and Along which Routes *(Appendix A)*

There is no public transportation along SR-177. Greyhound Bus Service and perhaps other commercial bus lines travel east and west along I-10 without designated stations at SR-177.

III. Projected Future Traffic

A. Project Traffic and Project Phasing (each study year)

1) Ambient Growth Rate

The desert cities of the County of Riverside experienced rapid growth in the recent boom period. Table 4 shows the growth of the two nearest cities based on numbers from the U.S Census Bureau website.

Table 4: Population Growth at I-10 Communities

City	Population			
	1990	2000	2009	Growth Rate, %
Blythe, CA	8,448	20,465	21,329	152
Indio, CA	36,850	49,116	82,230	123

The I-10 communities in the area have shown an approximately 135% growth rate over that 19 year span. However the unincorporated areas have not grown as rapidly. Table 5 shows rates of growth of about 45% over the same period in the unincorporated areas.

Table 5: Population Growth in Unincorporated County of Riverside

	Population			
	1990	2000	2009	Growth Rate, %
Balance of County	385,384	420,721	558,214	45

Caltrans provides a history of annual average daily traffic counts at interchanges throughout the state. The difference between volume of traffic west of the interchange and the volume of traffic east of the interchange is the net traffic exiting and entering at the interchange. An increase in traffic indicates an increase in the population or employment activity near that location.

Comparing the net traffic, the difference in the traffic on either side of the interchange as an indication of the traffic accessing the Desert Center area, shows a slower rate of growth. During the 1998 – 2008 time period, the growth in net traffic at the SR-177 ramp was 14%, an average rate of about 1.5% per year in net change. This is probably a more accurate number for the anticipated growth in the area. For the purposes of this analysis, a 3% total growth in the background traffic during the construction period was used. That would be an annual growth rate of 1.5% over a 2 year period.

Table 6: Caltrans Annual Average Daily Traffic Counts at SR-177 / I-10 Interchange

1998			2008			Growth Rate of Net Traffic, %
West of Interchange	**East of Interchange**	**Net Traffic**	**West of Interchange**	**East of Interchange**	**Net Traffic**	
15,100	13,700	1,400	23,000	21,400	1,600	14

2) Project Trip Generation

Project trips are the volume of traffic that will be added to the road system because of the development of the project. Since this land is currently undeveloped, all trips that will be generated by the project are considered to be project trips for the purposes of this study.

There are several ways to estimate the trips generated by a project. One way is to use data collected from a large number of similar projects. Such data has been compiled by the Institute of Transportation Engineers, "ITE Trip Generation Handbook." These data points have been plotted and best fit curves through these data points have been developed. However, the construction of a solar farm, substation, and transmission lines or the operation of these facilities is not identified in the ITE Trip Generation Handbook.

Therefore, an analysis of individual site activities including employment, deliveries of construction materials and equipment, the construction schedule, and future operational activities and resulting trips needs to be studied individually to identify the trips generated at varying phases of project development.

Furthermore, these trips need to be identified as to those trips occurring during the hours of expected peak traffic on the road. Generally there are two times when the existing traffic volume is highest: between 0600-0900 and 1600-1800 on a normal week day. The impacts of the traffic are studied for the peak one hour period during each of those two periods. The discussion that follows describes how the estimate the project trips of concern for both the AM and PM Peak Periods was generated.

Opening Day Project Trips - The project trips for the operation and maintenance of the Desert Harvest Solar Project will be low.

Given an Operation and Maintenance staff of 10 per shift, it is anticipated approximately 1 round trip by each will be made to the project site. About 5 delivery trips per weekday are anticipated. Table 7 shows an anticipated schedule of the trips to and from the site each day.

Table 7: Operation and Maintenance Project Trips

Buildings	**Staff per shift**	**Shifts**	**ADT Trips** (one-way)	**AM Peak Period**		**PM Peak Period**	
				IN	OUT	IN	OUT
O&M, etc.	10	0600 – 1800	20	-	-	-	-
	10	1800 – 0600	20		10	10	-
Guard Shack	5	0600 – 1800	10	-	-	-	-
	5	1800 – 0600	10	-	5	5	-
Deliveries		0800 – 1700	10	1	1	1	1
Total			**70**	**1**	**16**	**16**	**1**

This results in total Opening Day project trips of 17 trips during the AM and PM Peak Periods. An increase of 17 trips during the peak hour does not impact the intersections or roadway. The existing intersections and roadways have sufficient capacity to absorb these 17 trips without a decrease in LOS or operation. There is no concern for impacts to the study roads or intersection and no need for mitigation due to the operation and maintenance project trips for the Project.

A future analysis (20 year scenario) with these 17 trips was not performed. The project trips are not anticipated to change since the activity which generated the trips is not likely to change. The future background intersection volumes will increase based upon growth rates established earlier. However traffic forecasting for a 20 year scenario is not an exact science. The volumes forecasted will have a variance of more than these 17 project trips. Therefore, a future LOS was not performed.

Additionally the Riverside County Transportation Department Traffic Impact Analysis Preparation Guide does not require the analysis of intersections that receive less than 50 Peak Period project trips. The Project does not generate at least 50 Peak Period project trips during the operation and maintenance of its components after construction. The Project will generate at least 50 Peak Period project trips during the construction of its components. Construction traffic impacts will be analyzed.

Construction Traffic Project Trips- Frequently the impacts of the project trips during construction are ignored due to the limited duration and temporary nature of the impacts. The construction period of this project is expected to take from 2012 through 2014 or a little over 2 years. The number of project trips identified for Opening Day and the 20 year future scenario are too low to be significant. Therefore, the project trips from the construction activities were selected for impact analysis.

Construction Worker Project Trips –
Solar Project – The construction and management workers required are expected to peak at about 250 employees. Construction workers are expected

to be on site between 0700 – 1900. The hours may be adjusted for particular construction efforts (concrete pours) or to avoid the worst of the summer heat.

The project trips for the construction workers are shown in the following table. The calculations and assumptions leading to this table are given in more detail in Appendix B.

Table 8: Project Trips during Construction

Component	Daily Trips, PCEs	AM Peak Period		PM Peak Period	
		IN	OUT	IN	OUT
Solar Project	426	125	0	-	125
Guard Crew	20	0	5	-	0
Total	446	125	5	-	125

Construction Equipment Project Trips - The "Desert Harvest Solar Project Draft EIS and CDCA Plan Amendment", by Aspen Environmental Group November 2011 provided a great deal of information regarding quantities and types of vehicles that will be used for the construction of the Project and the materials that will be hauled to the construction site. It is anticipated that approximately 600 loads will be brought to the site over the course of the construction effort. The majority of the equipment and materials will be brought to the site via oversized vehicles.

Since access to the site requires driving the oversized vehicles on state controlled roads (I-10, SR-177, etc), permits from Caltrans are required. Those permits require the oversized vehicles to access the State's roads outside of the peak traffic periods.

The equipment will be brought to the site as needed and will not impact the public roads again until they depart. Most of this equipment will be brought to the site prior to the maximum level in construction worker traffic.

It is anticipated that an average of about 20 large vehicles will deliver equipment or material each day. Even though there may be several deliveries of materials a day for most of the construction period, most of these vehicles are not expected to move during the peak traffic periods. The only exception to this norm will be when concrete is being poured.

A concrete batch plant may be set up on site but if not concrete will be delivered in 10 cubic yard mixers to the project site from communities to the east. These vehicles have 3 axles on the road and move during all hours of the day.

Since concrete needs to be poured in cooler temperatures, the concrete trucks frequently move during the AM Peak Period. When the pouring sites are set up efficiently, up to 3 mixers can arrive, be unloaded and leave in an hour. For the purposes of this analysis, it is assumed that concrete is being poured in two sites at one time and that 6 mixers will arrive at the site and 5 mixers will leave the site in an hour's time during the AM Peak Period.

For the concrete to be unloaded effectively, the site needs to be set up and ready to go. This normally means that part of the construction crew has arrived earlier to set up the site. Approximately 10% of the workers were estimated to arrive earlier to set up the site.

Large trucks move through surface streets and intersections more slowly than cars and take more time to move through intersections. Since the analysis procedures are based on the number of passenger cars, the concrete mixer must be converted to an equivalent number of cars. The project truck trips were converted to passenger car equivalents (PCEs) by using a factor of 3. Using a PCE of 3 per concrete mixer, the number of project trips due to concrete mixers is 18 PCEs arriving and 15 PCEs leaving the AM Peak Period.

Concrete will not be poured during all peak traffic periods during the construction. But since the deliveries of large loads that are not oversized could happen during the peak periods, the inclusion of almost a third of the daily deliveries during the AM Peak Period results in a conservative estimate for the analysis.

Table 9: Construction Project Trips, PCEs

Component	Daily Trips, PCEs	AM Peak Period		PM Peak Period	
		IN	OUT	IN	OUT
Solar Project	426	125	0	0	125
Guards	20	0	5	0	0
Personnel Subtotal	**446**	**125**	**5**	**0**	**125**
Deliveries, Concrete, Equipment	Varies	18	15	0	0
Total	**-**	**143**	**20**	**0**	**125**

3) Project Trip Distribution and Assignment *(Figures 8 and 9)*

Access to the site will be primarily from I-10 via SR-177 and Kaiser Road. The majority of the construction workers will be assigned to the SOLAR FARM off Kaiser Road.

Construction Workers Distribution – The construction workers will access the site via the SR-177 / I-10 interchange. Those working at the Project will turn north at the interchange and travel on SR-177 to Kaiser Road to the site.

Given the low population density in the area it was assumed that only about 6% of the workers would come from the local area. The distribution assigned half of them as arriving from Eagle Mountain, a community north of the Project site and the other half arriving from the northeast using SR-177.

The remainder of the employees was distributed to arrive via I-10. The population centers, with available workers, are primarily west of the SR-177 / I-10 interchange. Due to the difference in population densities, the remaining construction worker traffic was divided approximately 70% - 30% west and east of the interchange.

Concrete Trucks – The project distribution has all concrete trucks arriving and leaving to the east from Blythe. A plant may be set up on site but concrete deliveries were included for this analysis.

Figure 8 shows the inbound project trip distribution in terms of percentage. The outbound distribution of project trips would be the opposite of the inbound distribution. Figure 9 shows the project trips distribution in terms of PCEs.

4) Other Factors Affecting Trip Generation (identify any factors used to adjust trip generation, such as pass-by trips, internal trips, or modal choice.

The Project is a destination that does not lend itself to pass-by trips, internal trips, or modal choice.

5) Construction Project Peak Hour Turning Movement Traffic

See Figures 8 and 9 discussed above.

6) Project Completion or Phase Completion Traffic Volumes

See Section III. A. 2. The construction worker traffic exceeds traffic generated by operation and maintenance activities and as such is the only traffic that needs to be considered in this traffic study.

C. Cumulative Traffic (background)

1) Ambient Growth Rate

See section III.A.1.

2) Identify Location of Other Approved or Proposed Development Projects

Cumulative traffic impacts are a concern when new projects have been approved, are funded for construction, but are currently not opened. In the near future, these projects would generate additional traffic trips throughout the study area. At the time of the data collection for existing traffic volumes, these cumulative project trips cannot be collected and must be estimated.

The Riverside County staff was contacted for the names and status of projects in the area. At this time none were identified that would used the intersections other than the Desert Sunlight Solar Farm and the Red Bluff Substation. The Farm and the Red Bluff Substation are under construction but are not contributing large numbers of vehicles on the road at this time.

3) Trip generation from Other Approved Projects – The Desert Sunlight Solar Farm is under construction. The Desert Sunlight Solar Farm Transmission line will soon be under construction. The Red Bluff Substation is or will be under construction soon. The counts taken in November did not show a high level of construction traffic at the time.

The highest months of construction traffic for the Desert Sunlight Solar Farm were anticipated to be the 5th and 6th months of construction. That period will be over before the Desert Harvest Solar Project begins construction.

To conservatively account for the construction traffic generated by the Desert Sunlight Solar Farm Project, half of its projected traffic for the Farm construction, the transmission line and Red Bluff Substation construction trips were included. Trips were included in the construction year scenario. The trip estimates and distribution for Desert Sunlight Farm Project are shown in Table 10 and diagramed on Figure 11. Details of how the Desert Sunlight Solar Farm project trips were developed are in Appendix B.[iv]

Table 10: Desert Sunlight Solar Farm Construction Project Trips, PCEs

Component	Daily Trips, PCEs	AM Peak Period		PM Peak Period	
		IN	OUT	IN	OUT
SOLAR FARM & TRANSMISSION LINE	204	88	2	-	10
RED BLUFF SUBSTATION	108	46	-	-	8
Visitors, etc.	10	-	-	-	-
Personnel Subtotal	**322**	**134**	**2**	**-**	**18**
Deliveries, Concrete, Equipment	-	18	15	-	-
Total	-	**152**	**17**	**-**	**18**

4) Trip Distribution and Assignment of Other Approved Development Projects - Not Applicable.

5) Total Background Peak Hour Turning Movement Volumes (Figures 10A and 10B)

The background traffic counted at the site was increased by 3% to project the background traffic expected during the construction period. To conservatively account for the construction traffic generated by the Desert Sunlight Solar Farm

Project, half of its projected traffic for the Farm construction, the transmission line and Red Bluff Substation construction trips were included.

IV. Traffic Analysis

A. Capacity, Level of Service and Improvement Analysis - Intersections

1) Delay and LOS for Existing Conditions

See Section II. D. LOS printouts are in Appendix C.

Table 11: LOS Summary for Existing Conditions and Traffic Volumes

Intersection	Control	AM Peak Period		PM Peak Period	
		Delay, sec	LOS	Delay, sec	LOS
SR-177 / I-10 EB	EB Off Ramp Stops	9.0	A	9.3	A
SR-177 / I-10 WB	WB Off Ramp Stops	9.1	A	9.7	A
SR-177 / Kaiser RD	SB Kaiser RD Stops	8.5	A	8.8	A

2) Delay and LOS for Project Conditions

For this project, the only activity which generates a traffic concern is the construction work. Normally construction impacts are not of concern as they are of short duration and temporary. Typically, the project trips are added to the opening day and future year scenario background traffic and it is the combination of those two volumes which generate a traffic impact. However, in this situation the existing ADT of the streets is in the 100 ADT range. The project trips added by the Project for Opening Day don't generate enough traffic volume warranting an evaluation or creating an impact.

In this situation the construction period will continue for more than 2 years and the number of vehicles used during construction will be substantially more than the anticipated volumes of traffic during the operation and maintenance of the Project. The construction traffic impacts were analyzed. More detailed LOS analysis printouts can be found in Appendix C.

Table 12: LOS Summary for Construction Period

Intersection	Control	Without Project		With Project	
AM Peak Period		Delay, sec	LOS	Delay, sec	LOS
SR-177 / I-10 EB	EB Off Ramp Stops	9.1	A	10.0	B
SR-177 / I-10 WB	WB Off Ramp Stops	9.1	A	9.9	A
SR-177 / Kaiser RD	SB Kaiser RD Stops	8.5	A	8.6	A

Intersection	Control	Without Project		With Project	
PM Peak Period		Delay, sec	LOS	Delay, sec	LOS
SR-177 / I-10 EB	EB Off Ramp Stops	9.3	A	9.8	A
SR-177 / I-10 WB	WB Off Ramp Stops	9.7	A	10.1	B
SR-177 / Kaiser RD	SB Kaiser RD Stops	8.8	A	9.6	A

To summarize the information in Table 12, the impact of the construction traffic to the background traffic expected during the construction period increased the delay at all intersections by less than one second. The construction traffic for this Project had no significant traffic impact at the intersections.

3) Delay and LOS under Cumulative Conditions

The construction period for both the Desert Sunlight Solar Farm and the Desert Harvest Solar Project will overlap. To conservatively account for the construction traffic generated by the Desert Sunlight Solar Farm Project, half of its projected traffic for the Farm construction, the transmission line and Red Bluff Substation construction trips were included as cumulative trips. The LOS of the anticipated background traffic and the Desert Sunlight Solar Farm Project and the Project traffic are included in Table 13. More detailed LOS analysis printouts can be found in Appendix C.

Table 13: LOS Summary for Cumulative Conditions

Intersection	Control	Without Project		With Project	
AM Peak Period		Delay, sec	LOS	Delay, sec	LOS
SR-177 / I-10 EB	EB Off Ramp Stops	9.4	A	10.6	B
SR-177 / I-10 WB	WB Off Ramp Stops	9.4	A	10.5	B
SR-177 / Kaiser RD	SB Kaiser RD Stops	8.6	A	8.7	A
PM Peak Period		Delay, sec	LOS	Delay, sec	LOS
SR-177 / I-10 EB	EB Off Ramp Stops	9.3	A	9.9	A
SR-177 / I-10 WB	WB Off Ramp Stops	9.7	A	10.1	B
SR-177 / Kaiser RD	SB Kaiser RD Stops	8.8	A	9.6	A

To summarize the information in Table 13, the impact of the construction traffic plus the anticipated background traffic and cumulative traffic volumes expected during the construction period increased the delay at all intersections by less than two seconds. The LOS did not deteriorate at the intersection of SR 177 / Kaiser Road. The LOS was lowered at the other intersections, but the impact was negligible.

The construction traffic for this Project had no significant traffic impact at the intersections.

V. Findings and Recommendations

A. Traffic Impacts and Level of Service Analysis

This analysis was prepared to identify traffic impacts and, if needed, propose mitigation of impacts, due to the construction of the Desert Harvest Solar Project (Project) proposed by enXco Development Corporation (enXco or Applicant). The Project includes a solar farm producing up to 150 MW of electrical power and the transmission line to carry the power to the soon to be constructed Red Bluff Substation. The Project will be located north of Desert Center in the unincorporated area of Riverside County[v].

This traffic study was completed with generally accepted procedures and reflects the opinions of Hernandez, Kroone & Associates (HKA). The methods used are based on the Highway Capacity Manual. The traffic study follows the outline in the Riverside County Transportation Department “Traffic Impact Analysis Preparation Guide”, dated April 2008.

The project trips were generated and distributed. The Project will generate less than 20 trips per peak traffic period after construction is completed. As analysis is not required at intersections with less than 50 peak hour trips, an Opening Day and Future Year (20 year scenario) was not completed.

However due to the length of the construction period, the construction traffic impacts were evaluated. Based on the construction trips and the distribution of those trips the following intersections were selected for analysis:

- SR-177 / I-10 EB Ramp
- SR-177 / 1-10 WB Ramp
- SR-177 / Kaiser Road

As noted before, the future conditions without project traffic is the yardstick to determine the magnitude of the project and its traffic impacts. The operation of the traffic without the project is compared to the operation of the traffic with the project to identify the traffic impacts. The measure of the operation of the traffic is called the Level of Service (LOS).

The study intersections were analyzed for the AM and PM peak traffic periods for the **without** project condition and the **with** project condition during the construction period. Counts were taken at these intersections, those volumes were increased by 3% to account for the increase in background traffic over the next two years to model the without project condition. The project trips were added to model the **with** project condition.

The Highway Capacity Software was used to calculate the LOS. Table 11 is a summary of the current operation of the intersections. All intersections currently operate at a LOS of A.

Table 12 summarizes the operation of the intersections during the construction time period.

Table 13 summarizes the operation of the intersection during the construction time period with the addition of the cumulative traffic volumes. Under these conditions the delay at all intersections increased by less than two seconds. The LOS did not deteriorate at the intersection of SR 177 / Kaiser Road. The LOS was lowered at the other intersections but it did not show a significant impact. The construction traffic for this Project had no significant traffic impact at the intersections.

The Project has no traffic impacts at the study intersections and no mitigation is required.

The construction traffic will add a number of large vehicles to the local roads. Being a "good neighbor" during construction might include the following efforts:

- Sweeping the paved roads periodically to cut down on dust picked up by the construction vehicles
- Documenting the current state of the roads (video and pavement coring) to be used during construction and returning the roads to the current level after construction.

B. Traffic Signal Warrant Analysis

No traffic signal warrant analysis is needed.

C. Circulation requirements

No on-site or area wide circulation improvements are needed.

Figure 1 – Aspen Environmental Group Figure 2-1 Project Overview (Vicinity Map)
Figure 2 – Aspen Environmental Group Figure 2-2 Alternative 3 Proposed Solar Project
Figure 3 – Photos of Intersections
Figure 4 – Photos of Intersections
Figure 5 – Existing Lane Configurations
Figure 6A – AM Existing Traffic in PCEs
Figure 6B – PM Existing Traffic in PCEs
Figure 7 – General Plan Circulation Element
Figure 8 - Project Trip Distribution, %
Figure 9 - Project Trip Distribution, PCEs
Figure 10A – AM Background Traffic Adjusted for Construction Period w/o Project
Figure 10B – PM Background Traffic Adjusted for Construction Period w/o Project
Figure 11 – Desert Sunlight Solar Farm Project Trips
Figure 12A – AM Background with Cumulative Traffic Volumes, in PCEs
Figure 12B – PM Background with Cumulative Traffic Volumes, in PCEs

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[i] Aspen Environmental Group, "Desert Harvest Solar Project Draft EIS and CDCA Plan Amendment", November 2011, page 2-1.

[ii] Aspen Environmental Group, "Desert Harvest Solar Project Draft EIS and CDCA Plan Amendment", November 2011, page 2-4 and page 2-5.

[iii] Riverside County Integrated Project, Desert Center Area Plan Circulation, Figure 6.

[iv] Hernandez, Kroone & Associates, Traffic Study for "Desert Sunlight Solar Farm", June 2010.

[v] Aspen Environmental Group, "Desert Harvest Solar Project Draft EIS and CDCA Plan Amendment", November 2011, page 2-1.

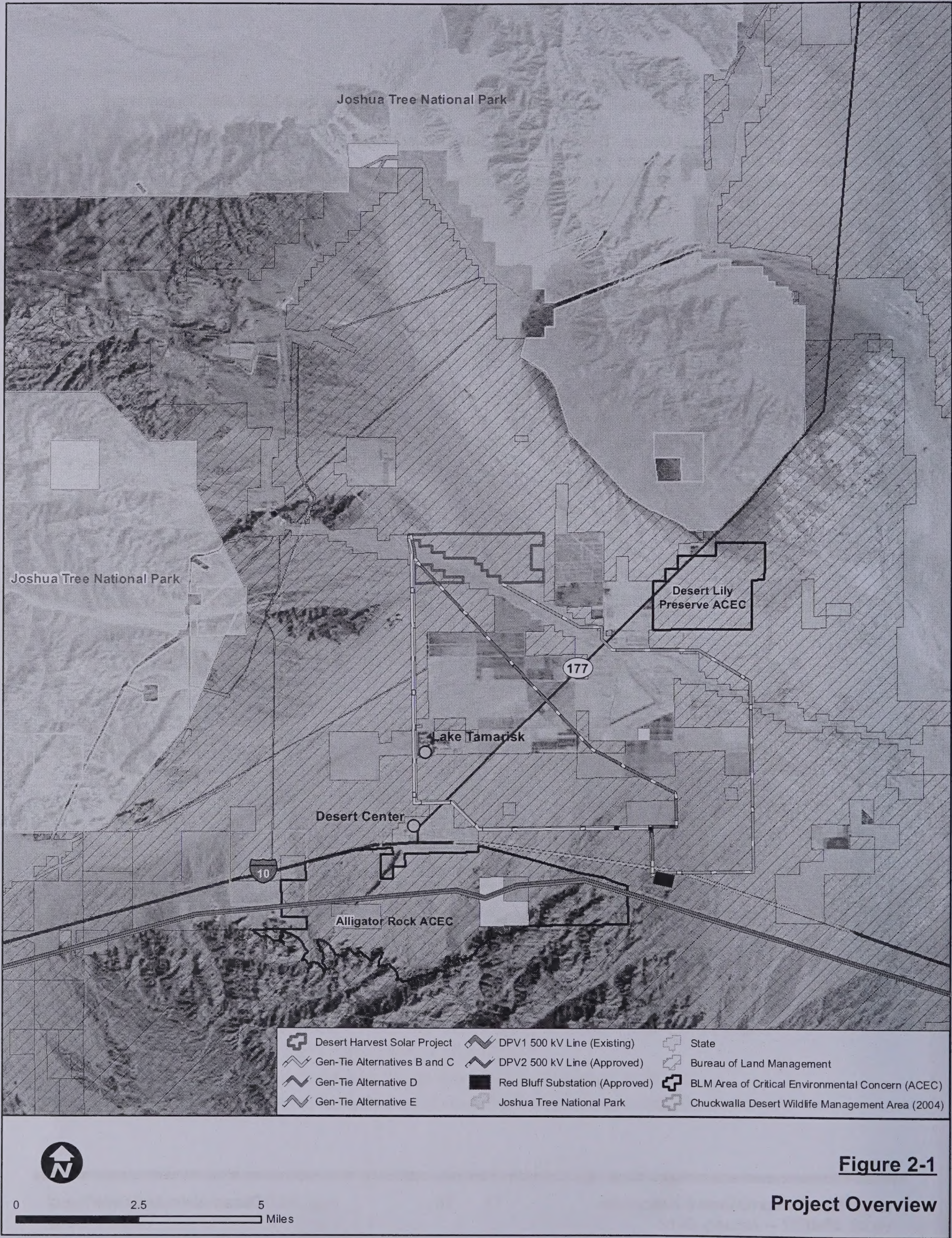

Joshua Tree National Park
Joshua Tree National Park
Desert Lily Preserve ACEC
177
Lake Tamarisk
Desert Center
10
Alligator Rock ACEC
Desert Harvest Solar Project
Gen-Tie Alternatives B and C
Gen-Tie Alternative D
Gen-Tie Alternative E
DPV1 500 kV Line (Existing)
DPV2 500 kV Line (Approved)
Red Bluff Substation (Approved)
Joshua Tree National Park
State
Bureau of Land Management
BLM Area of Critical Environmental Concern (ACEC)
Chuckwalla Desert Wildlife Management Area (2004)
N
0
2.5
5
Miles

Figure 2-1

Project Overview

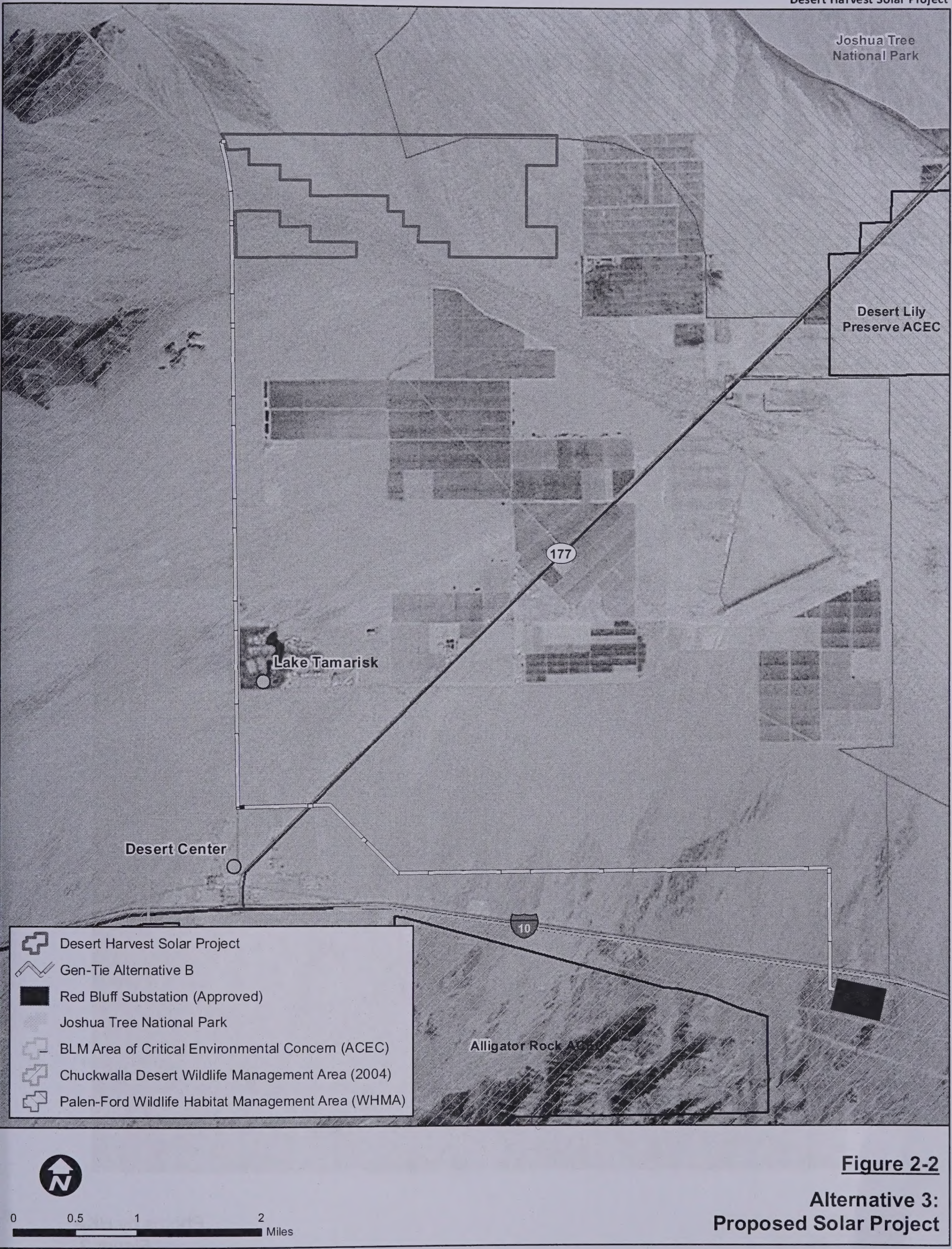
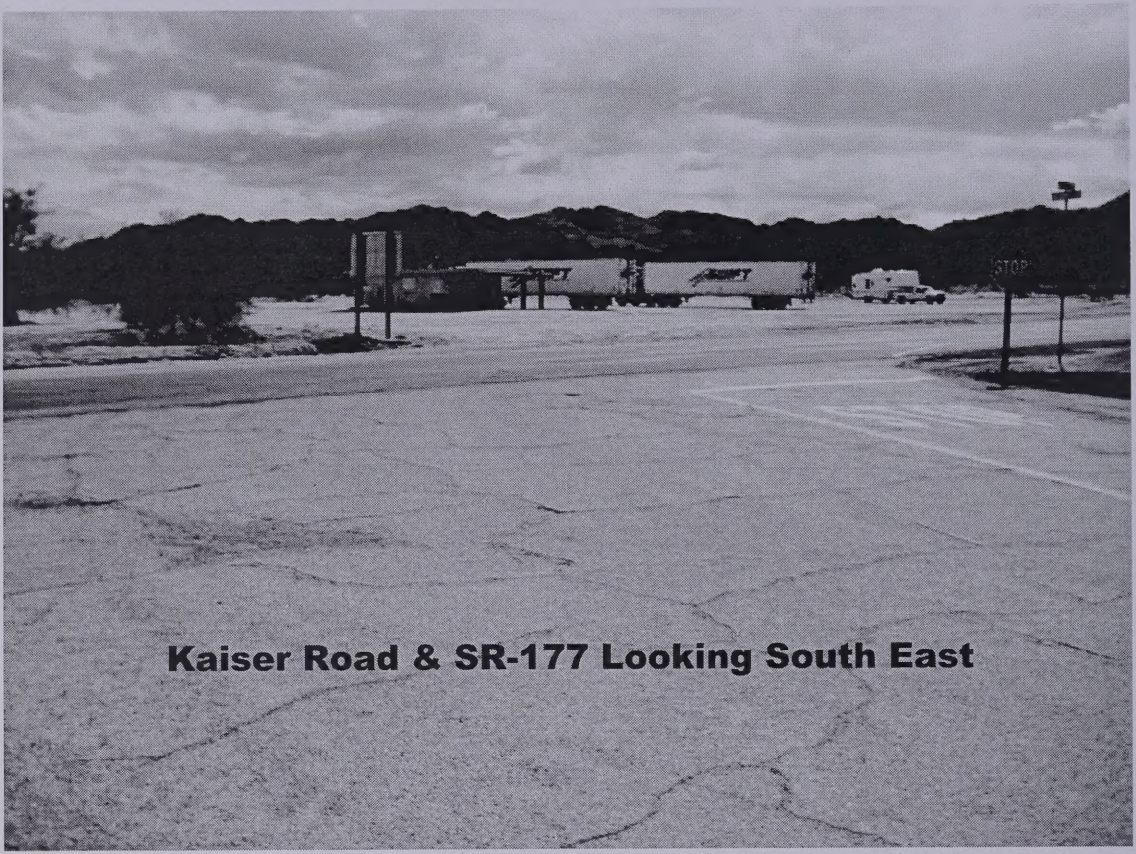
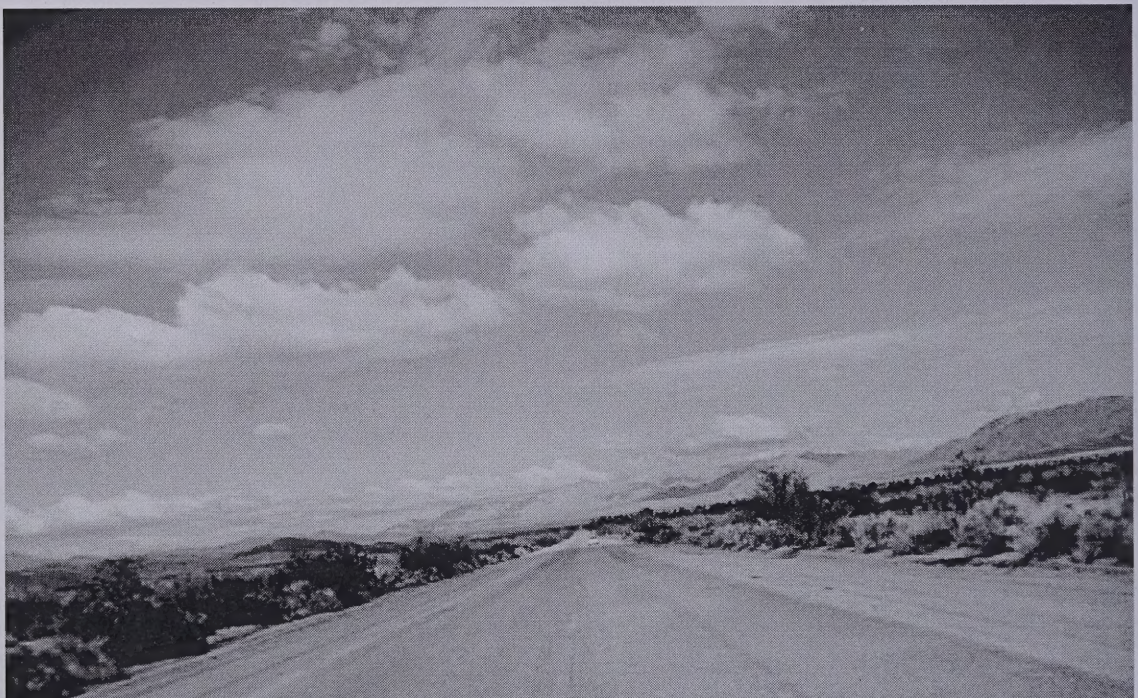

Joshua Tree National Park
Desert Lily Preserve ACEC
177
Lake Tamarisk
Desert Center
10
Alligator Rock ACEC
Desert Harvest Solar Project
Gen-Tie Alternative B
Red Bluff Substation (Approved)
Joshua Tree National Park
BLM Area of Critical Environmental Concern (ACEC)
Chuckwalla Desert Wildlife Management Area (2004)
Palen-Ford Wildlife Habitat Management Area (WHMA)
N
0
0.5
1
2
Miles

Figure 2-2

Alternative 3:
Proposed Solar Project

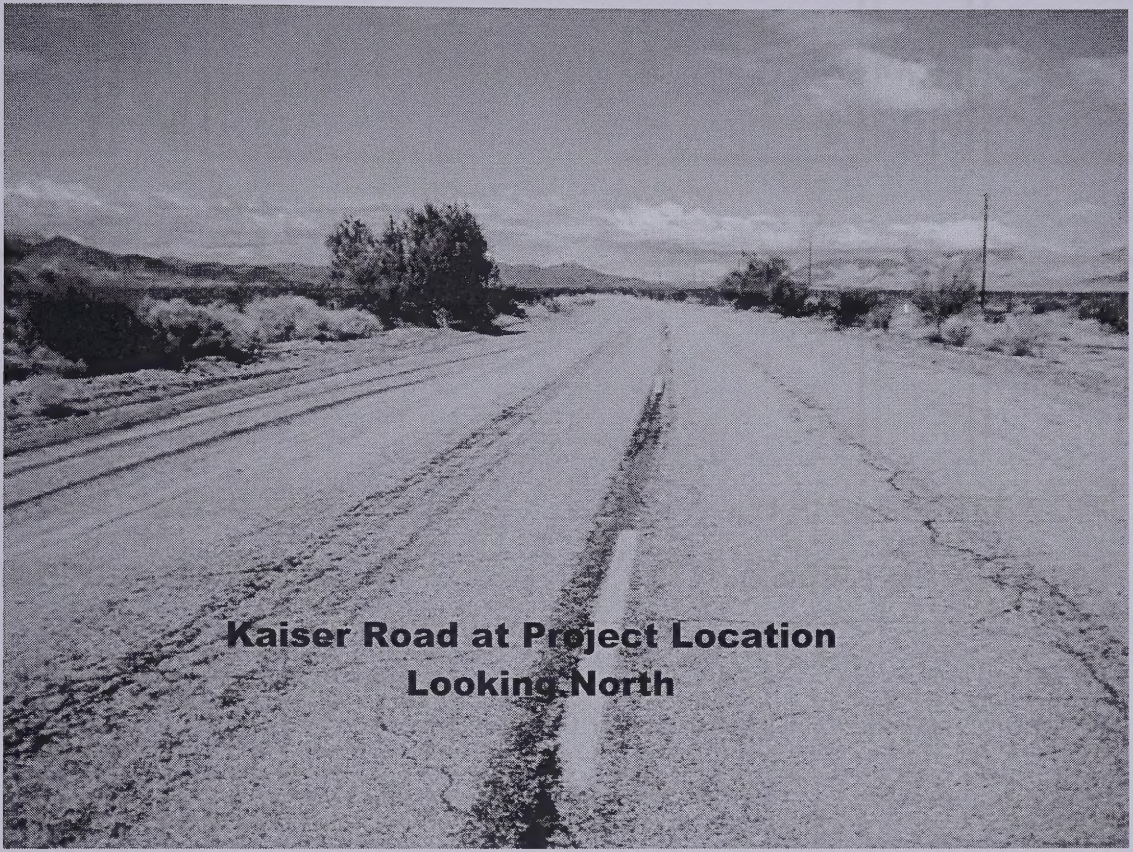


Kaiser Road & SR-177 Looking South East

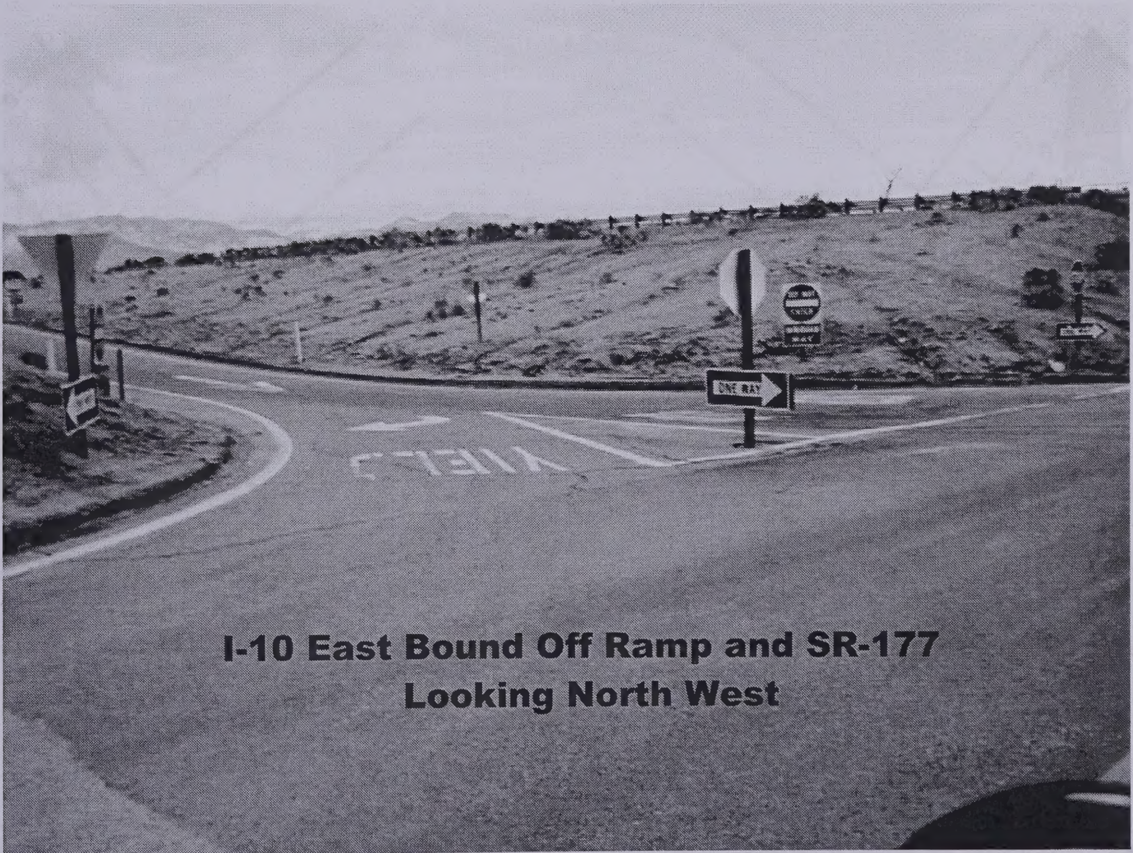


Kaiser Road - One Mile North of SR-177 Looking North

Photos by HKA
Figure 3

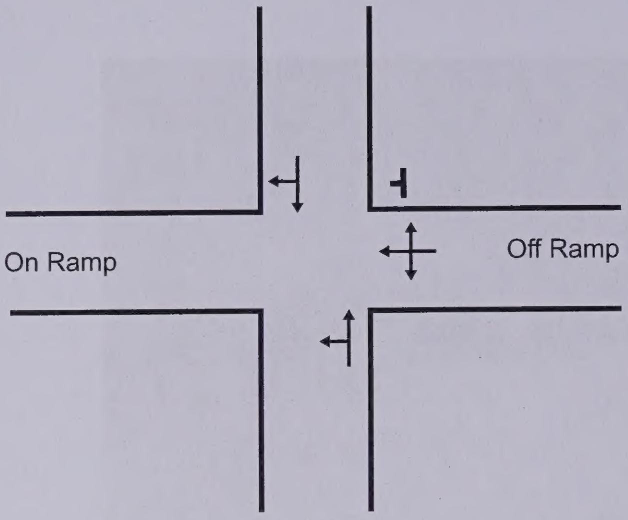


Kaiser Road at Project Location
Looking North

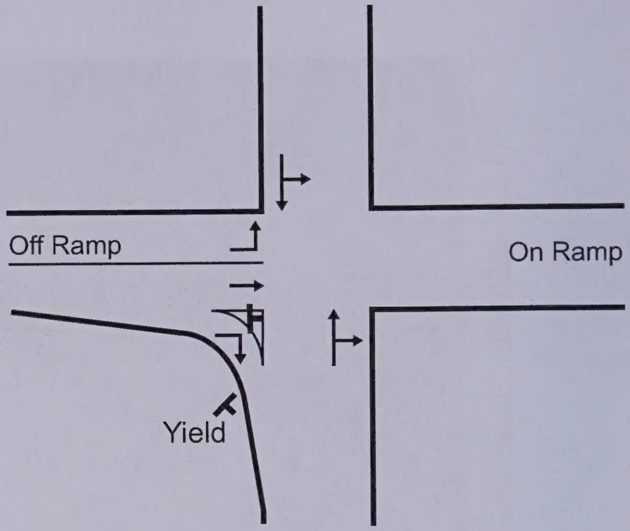


I-10 East Bound Off Ramp and SR-177
Looking North West

Photos by HKA
Figure

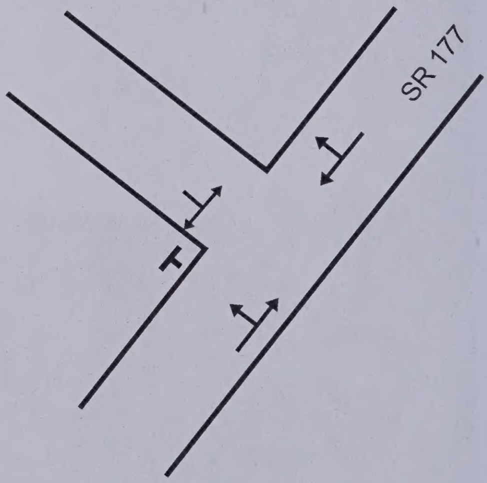


I-10 WEST BOUND (E-W)
and
STATE ROUTE 177 (N-S)



I-10 EASTBOUND (E-W)
AND
STATE ROUTE 177 (N-S)

NORTH
N.T.S.



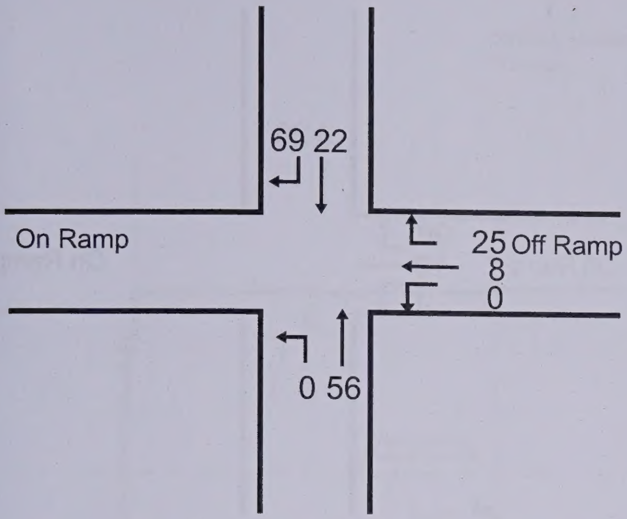
KAISER ROAD (NW-SE)
AND
STATE ROUTE 177 (NE-SW)

Legend

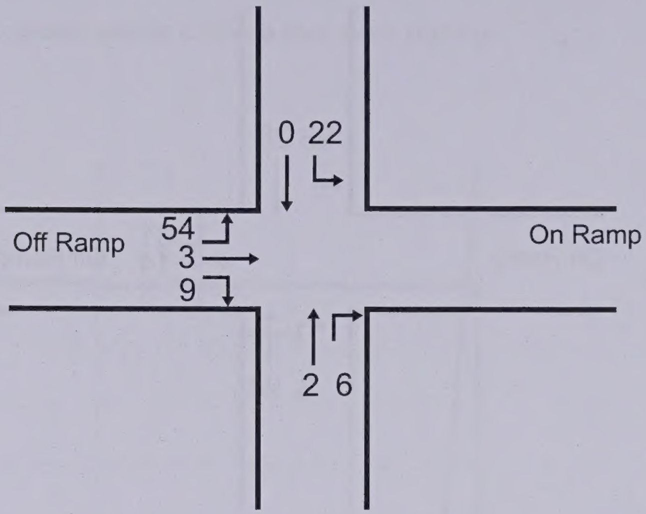
↰ Direction of Traffic

┬ Stop Sign

Hernandez, Kroone & Associates, Inc - CONSULTING ENGINEERS - PLANNING - DESIGN - SURVEYING 234 EAST DRAKE DRIVE SAN BERNARDINO, CA 92408 (909) 884-3222 FAX (909) 383-1577 E-MAIL: richardh@hkagroup.com	DESCRIPTION Existing Lane Configurations Figure 5	PROJECT NO. 11-1027 DATE 12-02-2011

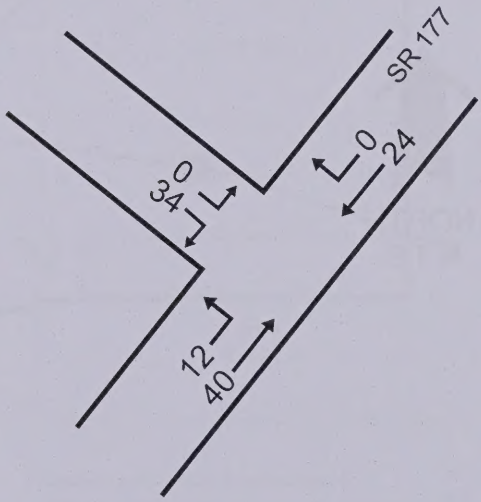


I-10 WEST BOUND (E-W)
and
STATE ROUTE 177 (N-S)



I-10 EASTBOUND (E-W)
AND
STATE ROUTE 177 (N-S)

NORTH
N.T.S.



KAISER ROAD (NW-SE)
AND
STATE ROUTE 177 (NE-SW)

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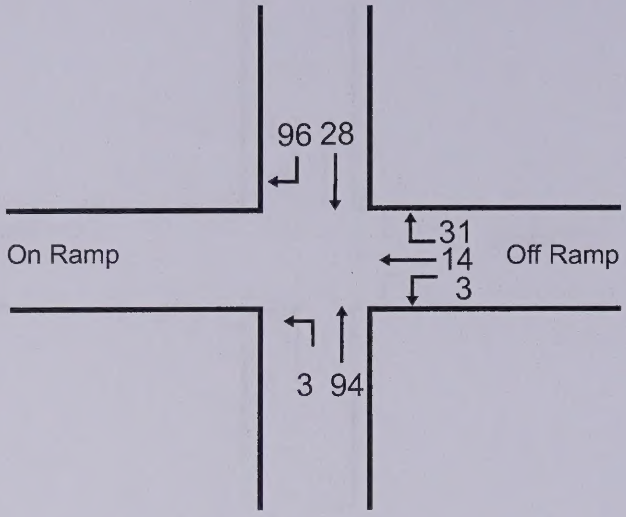
234 EAST DRAKE DRIVE
SAN BERNARDINO, CA 92408
(909) 884-3222 FAX (909) 383-1577
E-MAIL: richardh@hkagroup.com

DESCRIPTION

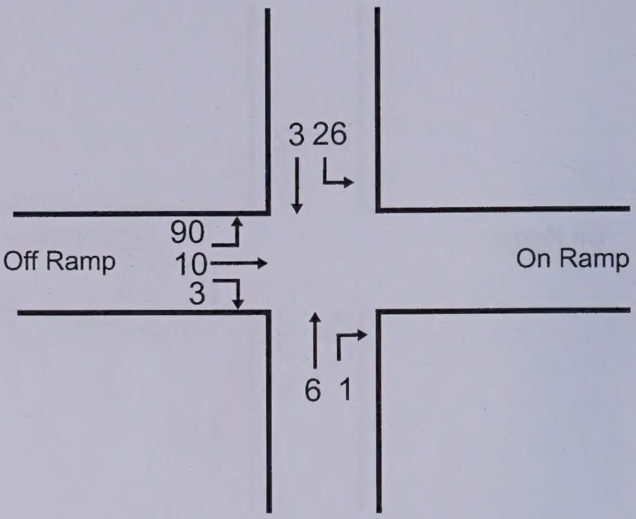
AM Existing Traffic
in PCEs
Figure 6A

PROJECT NO.
11-1027

DATE
1-23-2012

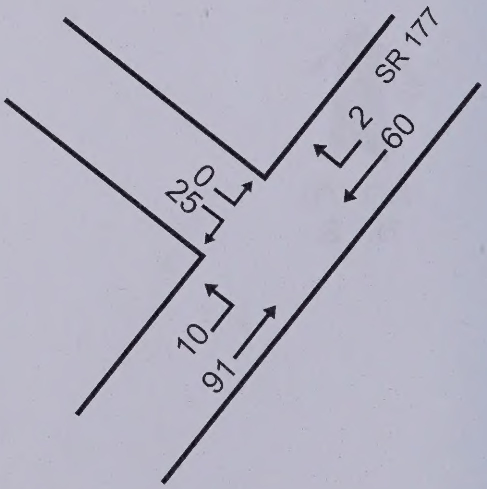


I-10 WEST BOUND (E-W)
and
STATE ROUTE 177 (N-S)



I-10 EASTBOUND (E-W)
AND
STATE ROUTE 177 (N-S)

NORTH
N.T.S.



KAISER ROAD (NW-SE)
AND
STATE ROUTE 177 (NE-SW)

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DESCRIPTION
PM Existing Traffic,
in PCEs
Figure 6B

PROJECT NO.
11-1027

DATE
1-23-2012

official, scenic highway in accordance with the California State Scenic Highway Program.

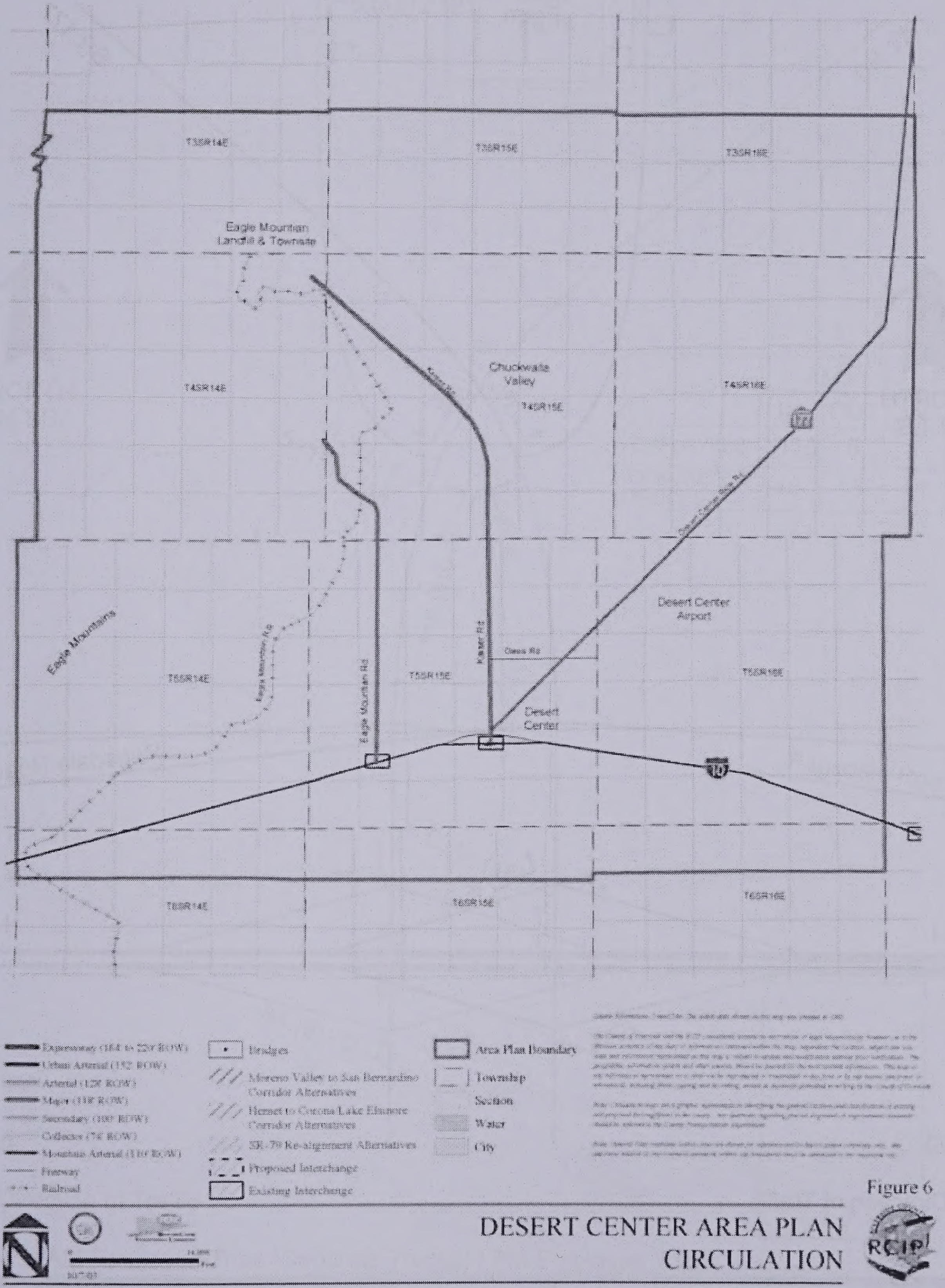
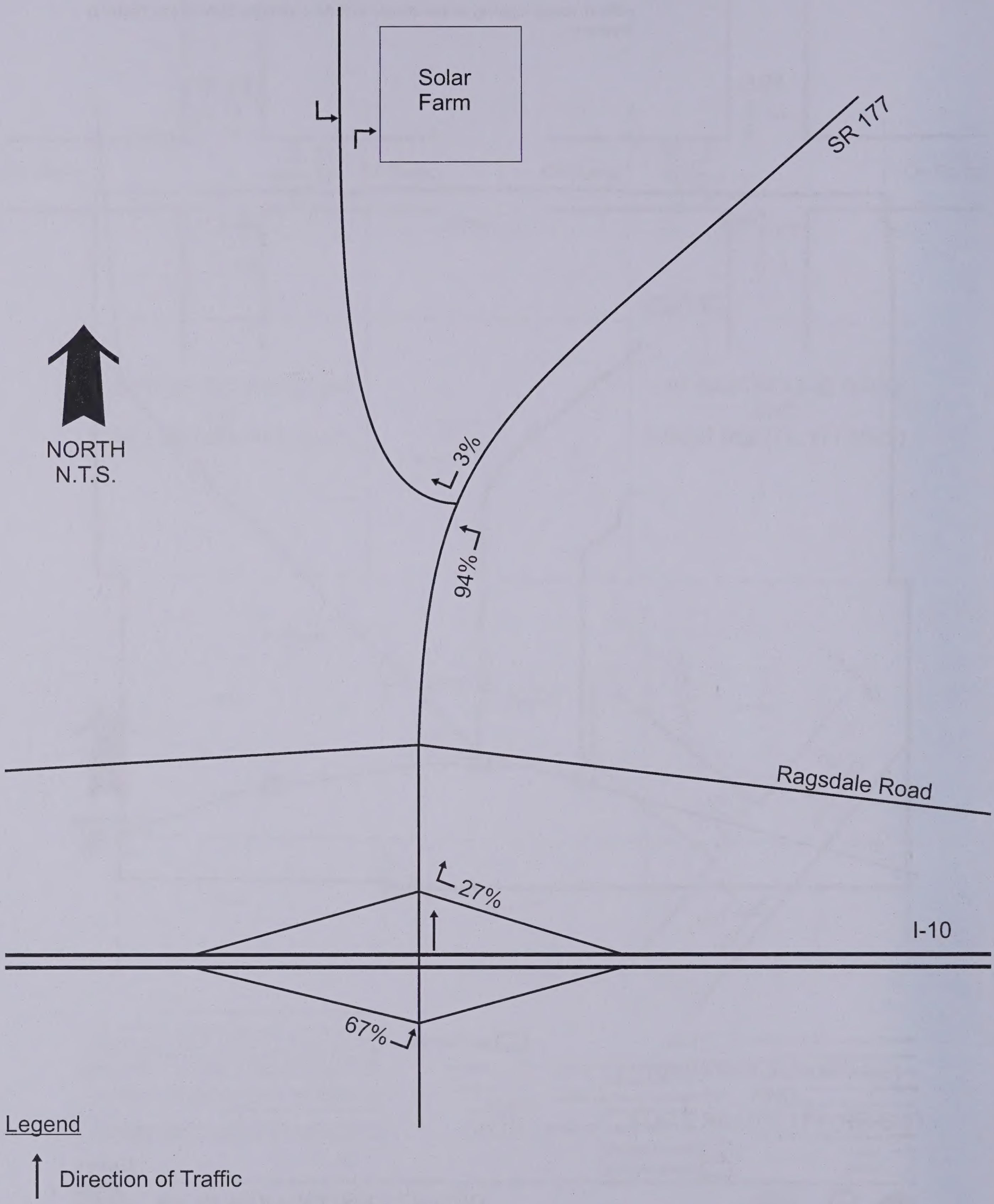


Figure 7: Trails and Bikeway System

Figure 7 Circulation
County of Riverside



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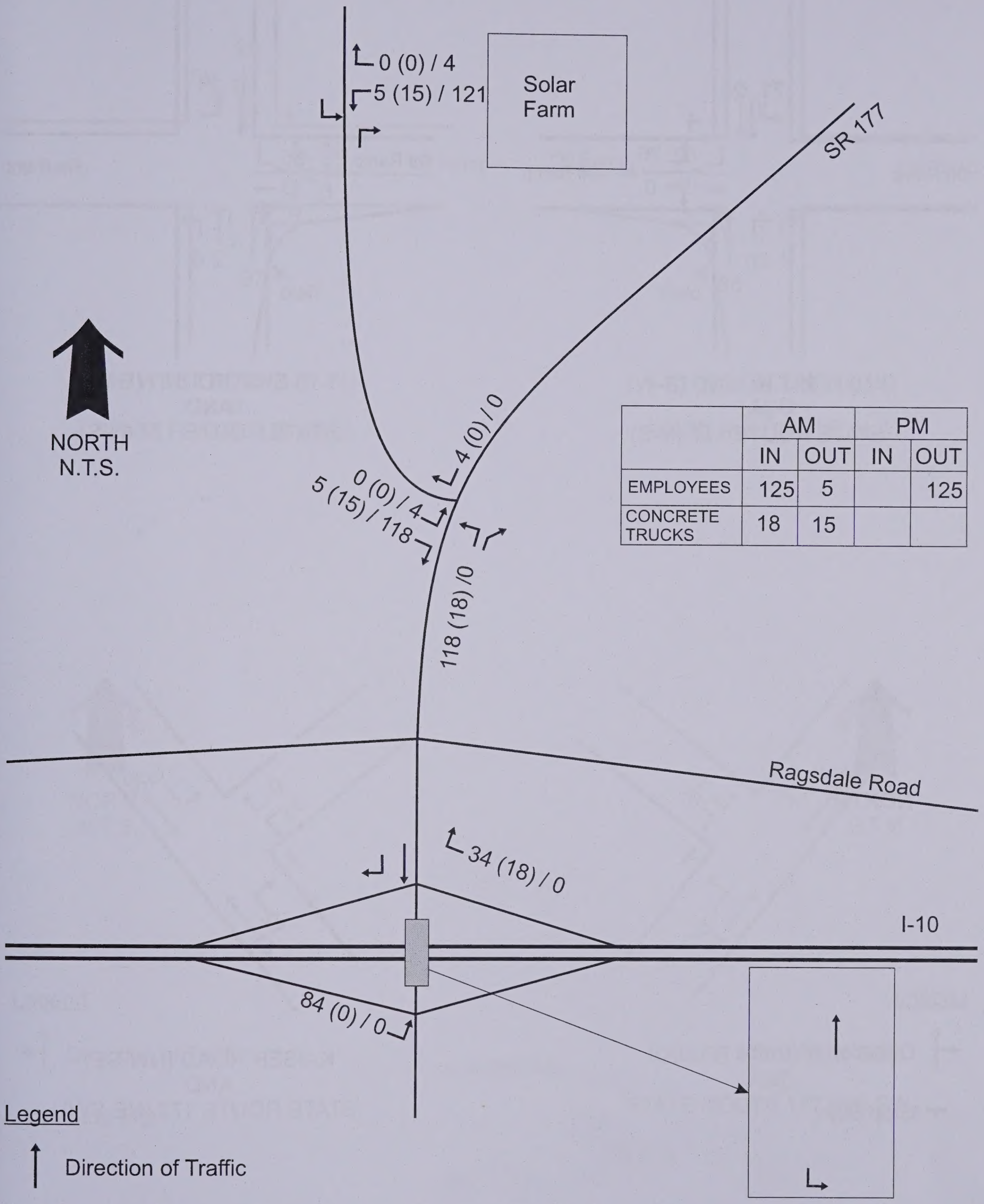
HKA

DESCRIPTION

Project Trip
Distribution, %
Figure 8

PROJECT NO.
11-1027

DATE
11-23-2011



	AM		PM	
	IN	OUT	IN	OUT
EMPLOYEES	125	5		125
CONCRETE TRUCKS	18	15		

Legend

↑ Direction of Traffic

x (x) / x - AM Employee Trips (Concrete Trucks) / PM Employee Trips

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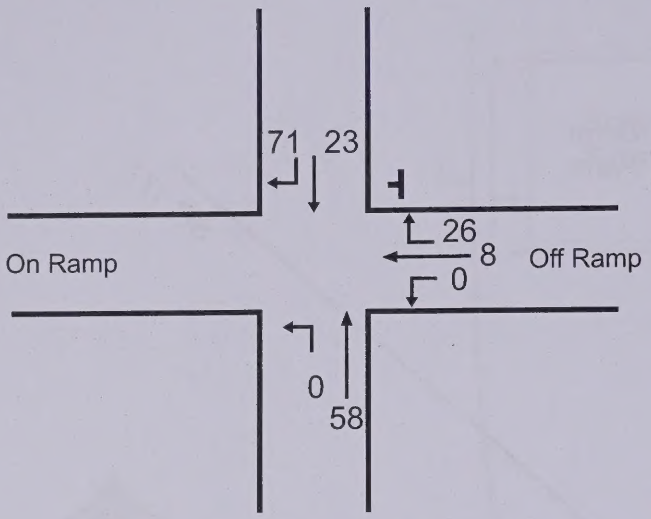
E-MAIL: richardh@hkagroup.com

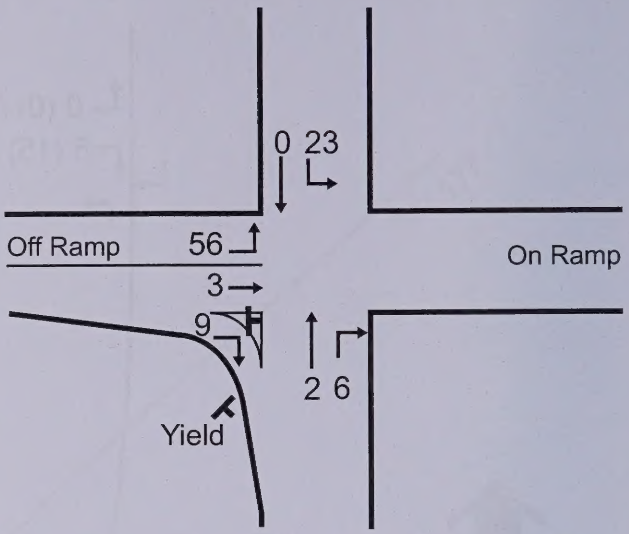
DESCRIPTION
Project Trip
Distribution, PCEs
Figure 9

PROJECT NO.
11-1027

DATE
1-21-2012

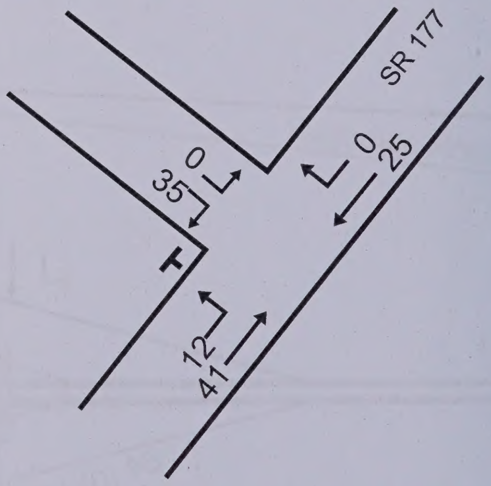


I-10 WEST BOUND (E-W)
and
STATE ROUTE 177 (N-S)



I-10 EASTBOUND (E-W)
AND
STATE ROUTE 177 (N-S)

NORTH
N.T.S.



KAISER ROAD (NW-SE)
AND
STATE ROUTE 177 (NE-SW)

Legend

↰ Direction of Traffic

⊤ Stop Sign

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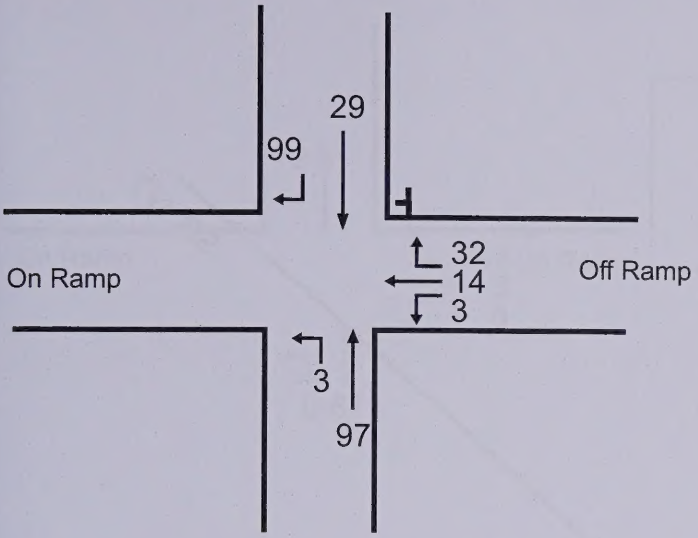
HKA

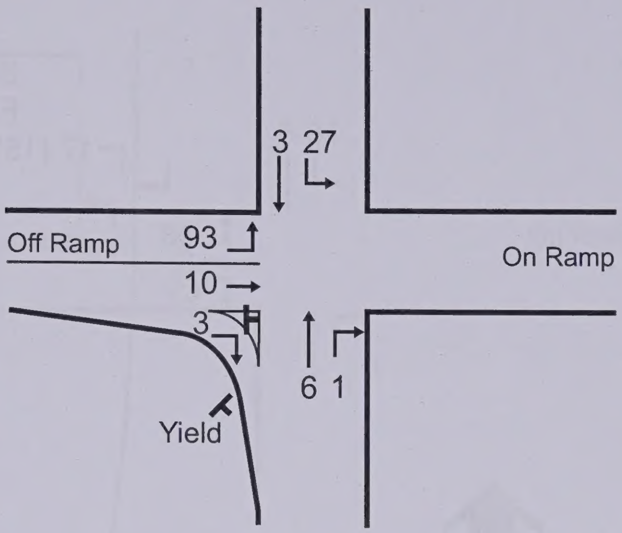
DESCRIPTION
AM Background Traffic adjusted for Construction Period wo/Project
Figure 10A

PROJECT NO.
11-1027

DATE
1-23-2012

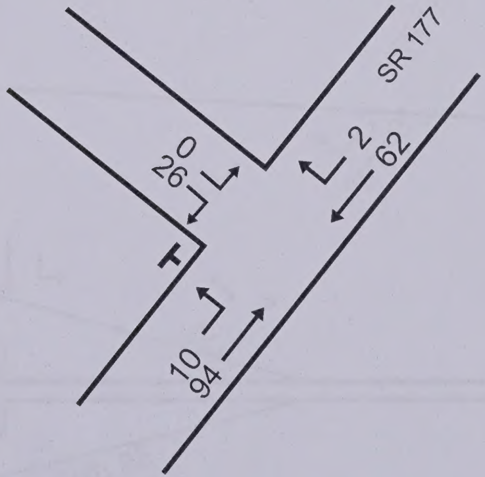


I-10 WEST BOUND (E-W)
and
STATE ROUTE 177 (N-S)



I-10 EASTBOUND (E-W)
AND
STATE ROUTE 177 (N-S)

NORTH
N.T.S.



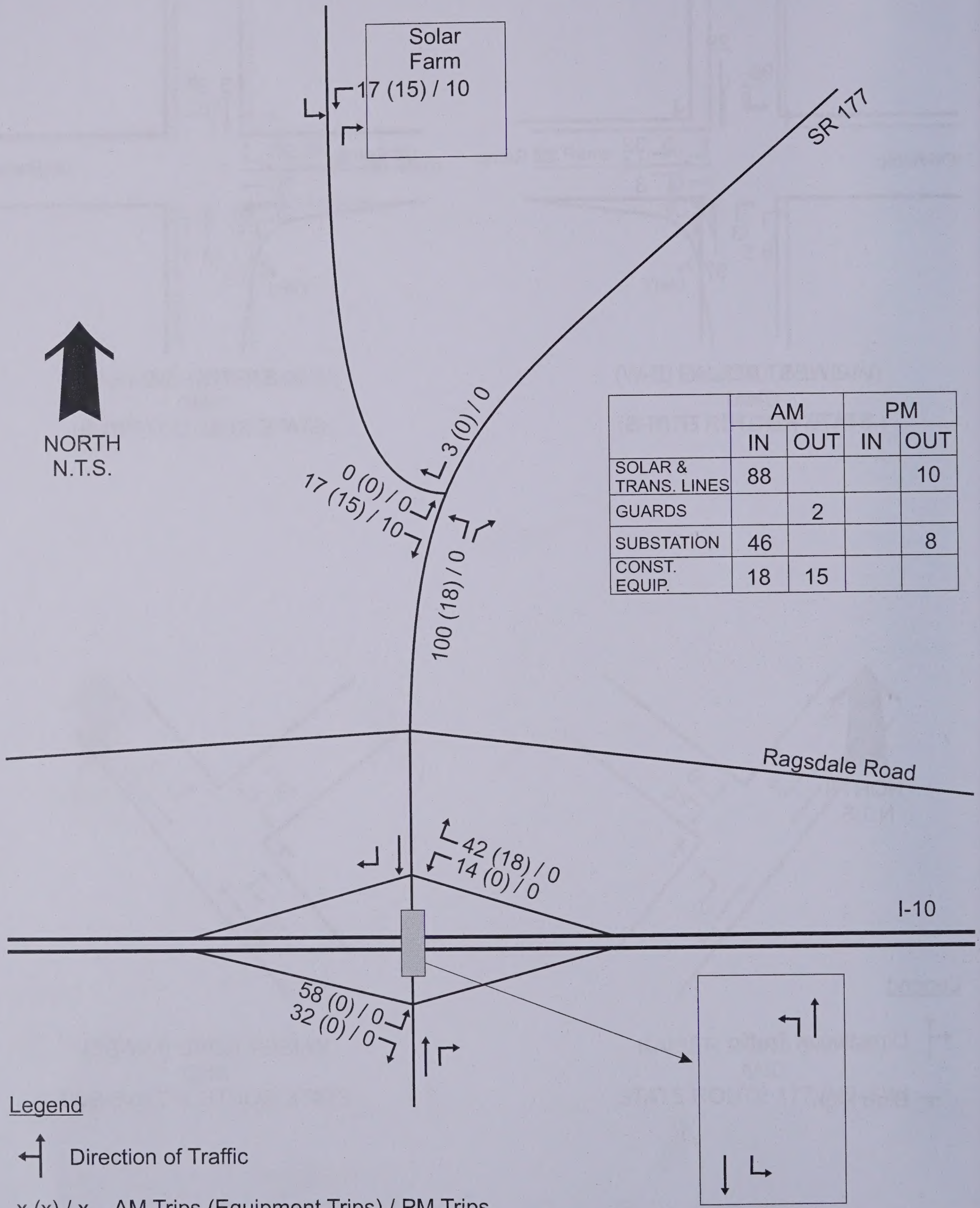
KAISER ROAD (NW-SE)
AND
STATE ROUTE 177 (NE-SW)

Legend

↰ Direction of Traffic

┬ Stop Sign

Hernandez, Kroone & Associates, Inc - CONSULTING ENGINEERS - PLANNING - DESIGN - SURVEYING HKA 234 EAST DRAKE DRIVE SAN BERNARDINO, CA 92408 (909) 884-3222 FAX (909) 383-1577 E-MAIL: richardh@hkagroup.com	DESCRIPTION PM Background Traffic Adjusted for Construction Period wo/Project Figure 10B	PROJECT NO. 11-1027 DATE 1-23-2012



	AM		PM	
	IN	OUT	IN	OUT
SOLAR & TRANS. LINES	88			10
GUARDS		2		
SUBSTATION	46			8
CONST. EQUIP.	18	15		

Legend

Direction of Traffic

x (x) / x - AM Trips (Equipment Trips) / PM Trips

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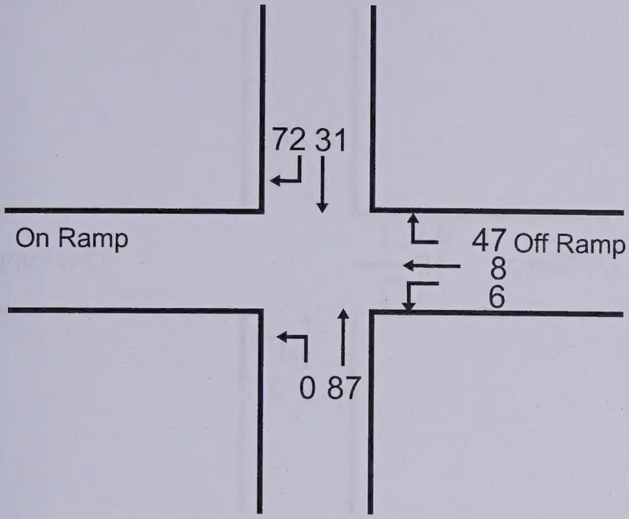
E-MAIL: richardh@hkagroup.com

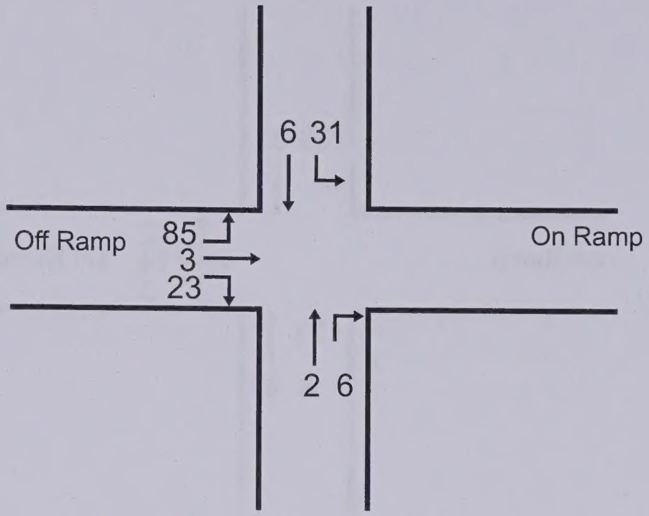
DESCRIPTION
Desert Sunlight Solar Farm
Project Trips
Figure 11

PROJECT NO.
11-1027

DATE
12-02-2011

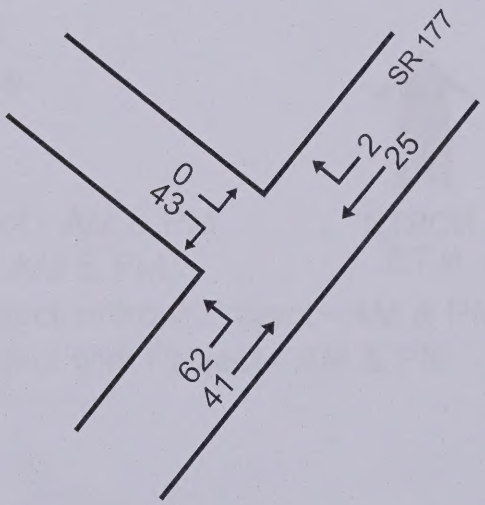


I-10 WEST BOUND (E-W)
and
STATE ROUTE 177 (N-S)



I-10 EASTBOUND (E-W)
AND
STATE ROUTE 177 (N-S)

NORTH
N.T.S.



KAISER ROAD (NW-SE)
AND
STATE ROUTE 177 (NE-SW)

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(909) 884-3222 FAX (909) 383-1577
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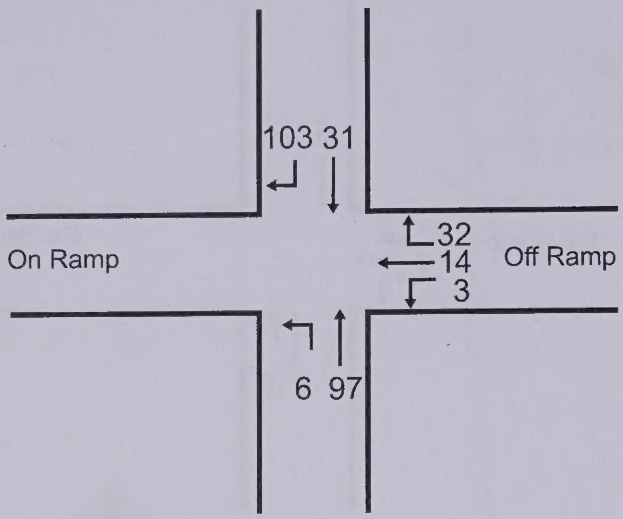
DESCRIPTION

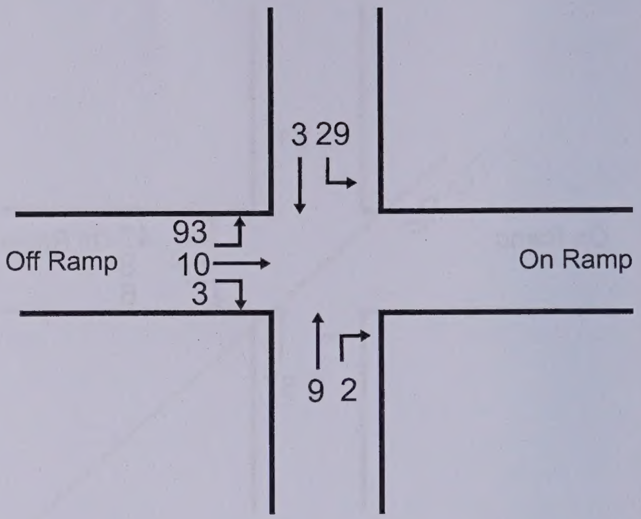
AM Background with Cumulative
Traffic Volumes,
in PCEs
Figure 12A

PROJECT NO.
11-1027

DATE
1-23-2012

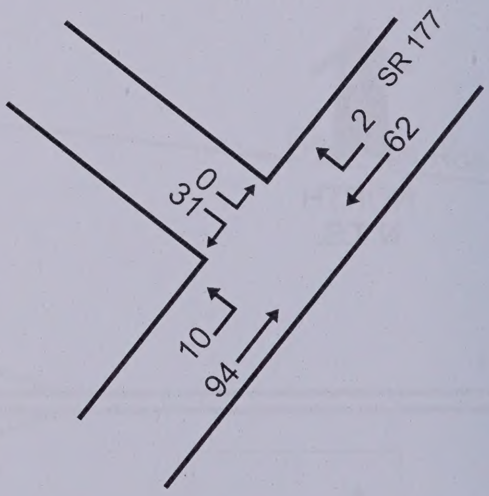


I-10 WEST BOUND (E-W)
and
STATE ROUTE 177 (N-S)



I-10 EASTBOUND (E-W)
AND
STATE ROUTE 177 (N-S)

NORTH
N.T.S.



KAISER ROAD (NW-SE)
AND
STATE ROUTE 177 (NE-SW)

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DESCRIPTION
PM Background with Cumulative
Traffic Volumes,
in PCEs
Figure 12B

PROJECT NO.
11-1027

DATE
1-23-2012

Appendix C
LOS Analysis

- Existing – AM & PM
- Construction Years without Project - AM & PM
- Construction Years with Project - AM & PM
- Construction and Cumulative Project without Project - AM & PM
- Construction and Cumulative Project with Project - AM & PM

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*NJC*	Intersection	*SR-177 / I-10 EB Off Ramp*
Agency/Co.	*Hernandez, Kroone & Associates*	Jurisdiction	
Date Performed	*1/23/2012*	Analysis Year	*Existing*
Analysis Time Period	*AM*		
Project Description *11-1027*			
East/West Street: *I-10 EB Off Ramp*		North/South Street: *SR-177*	
Intersection Orientation: *North-South*		Study Period (hrs): *0.25*	

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*0*	*2*	*6*	*22*	*0*	*0*
Peak-Hour Factor, PHF	*0.83*	*0.83*	*0.83*	*0.83*	*0.83*	*0.83*
Hourly Flow Rate, HFR	*0*	*2*	*7*	*26*	*0*	*0*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration			*TR*	*LT*		
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*54*	*3*	*9*
Peak-Hour Factor, PHF	*0.83*	*0.83*	*0.83*	*0.83*	*0.83*	*0.83*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*65*	*3*	*10*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*1*
Lanes	*0*	*0*	*0*	*1*	*1*	*1*
Configuration				*L*	*T*	*R*

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*				*L*	*T*	*R*
v (vph)		*26*				*65*	*3*	*10*
C (m) (vph)		*1624*				*939*	*821*	*1091*
v/c		*0.02*				*0.07*	*0.00*	*0.01*
95% queue length		*0.05*				*0.22*	*0.01*	*0.03*
Control Delay		*7.3*				*9.1*	*9.4*	*8.3*
LOS		*A*				*A*	*A*	*A*
Approach Delay	--	--				*9.0*		
Approach LOS	--	--				*A*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		**Site Information**	
Analyst	*NJC*	Intersection	*SR-177 / I-10 EB Off Ramp*
Agency/Co.	*Hernandez, Kroone & Associates*	Jurisdiction	
Date Performed	*1/23/2012*	Analysis Year	*Existing*
Analysis Time Period	*PM*		
Project Description *11-1027*			
East/West Street: *I-10 EB Off Ramp*		North/South Street: *SR-177*	
Intersection Orientation: *North-South*		Study Period (hrs): *0.25*	

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*0*	*6*	*1*	*26*	*3*	*0*
Peak-Hour Factor, PHF	*0.97*	*0.97*	*0.97*	*0.97*	*0.97*	*0.97*
Hourly Flow Rate, HFR	*0*	*6*	*1*	*26*	*3*	*0*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration			*TR*	*LT*		
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*90*	*10*	*3*
Peak-Hour Factor, PHF	*0.97*	*0.97*	*0.97*	*0.97*	*0.97*	*0.97*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*92*	*10*	*3*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*1*
Lanes	*0*	*0*	*0*	*1*	*1*	*1*
Configuration				*L*	*T*	*R*

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*				*L*	*T*	*R*
v (vph)		*26*				*92*	*10*	*3*
C (m) (vph)		*1627*				*935*	*820*	*1087*
v/c		*0.02*				*0.10*	*0.01*	*0.00*
95% queue length		*0.05*				*0.33*	*0.04*	*0.01*
Control Delay		*7.2*				*9.3*	*9.4*	*8.3*
LOS		*A*				*A*	*A*	*A*
Approach Delay	--	--				*9.3*		
Approach LOS	--	--				*A*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	NJC	Intersection	SR-177 / I-10 WB OFF RAMP
Agency/Co.	HERNANDEZ KROONE & ASSOCIATES	Jurisdiction	
Date Performed	1/23/2012	Analysis Year	EXISTING
Analysis Time Period	AM		
Project Description	11-1027		
East/West Street:	I-10 WB OFF RAMP	North/South Street:	SR-177
Intersection Orientation:	North-South	Study Period (hrs):	0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	0	56	0	0	22	69
Peak-Hour Factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81
Hourly Flow Rate, HFR	0	69	0	0	27	85
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	0	8	25	0	0	0
Peak-Hour Factor, PHF	0.81	0.81	0.81	0.81	0.81	0.81
Hourly Flow Rate, HFR	0	9	30	0	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	0	0
Configuration		LTR				

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT			LTR				
v (vph)	0			39				
C (m) (vph)	1490			917				
v/c	0.00			0.04				
95% queue length	0.00			0.13				
Control Delay	7.4			9.1				
LOS	A			A				
Approach Delay	--	--	9.1					
Approach LOS	--	--	A					

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TWO-WAY STOP CONTROL SUMMARY

General Information		**Site Information**	
Analyst	*NJC*	Intersection	*SR-177 / I-10 WB OFF RAMP*
Agency/Co.	*HERNANDEZ KROONE & ASSOCIATES*	Jurisdiction	
Date Performed	*1/23/2012*	Analysis Year	*EXISTING*
Analysis Time Period	*PM*		

Project Description *11-1027*			
East/West Street: *I-10 WB OFF RAMP*		North/South Street: *SR-177*	
Intersection Orientation: *North-South*		Study Period (hrs): *0.25*	

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*3*	*94*	*0*	*0*	*28*	*96*
Peak-Hour Factor, PHF	*0.85*	*0.85*	*0.85*	*0.85*	*0.85*	*0.85*
Hourly Flow Rate, HFR	*3*	*110*	*0*	*0*	*32*	*112*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*3*	*14*	*31*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.85*	*0.85*	*0.85*	*0.85*	*0.85*	*0.85*
Hourly Flow Rate, HFR	*3*	*16*	*36*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*0*	*0*
Configuration		*LTR*				

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*			*LTR*				
v (vph)	*3*			*55*				
C (m) (vph)	*1451*			*827*				
v/c	*0.00*			*0.07*				
95% queue length	*0.01*			*0.21*				
Control Delay	*7.5*			*9.7*				
LOS	*A*			*A*				
Approach Delay	--	--	*9.7*					
Approach LOS	--	--	*A*					

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*NJC*	Intersection	*SR-177 / KAISER ROAD*
Agency/Co.	*HERNANDEZ, KROONE & ASSOCIATES*	Jurisdiction	
Date Performed	*1/23/2012*	Analysis Year	*Existing*
Analysis Time Period	*AM*		
Project Description	*11-1027*		
East/West Street:	*KAISER ROAD*	North/South Street:	*SR-177*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*12*	*40*	*0*	*0*	*24*	*0*
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*
Hourly Flow Rate, HFR	*13*	*44*	*0*	*0*	*26*	*0*
Percent Heavy Vehicles	*0*	*--*	*--*	*0*	*--*	*--*
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*0*	*0*	*34*
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*0*	*0*	*37*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration					*LR*	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (vph)	*13*						*37*	
C (m) (vph)	*1601*						*1056*	
v/c	*0.01*						*0.04*	
95% queue length	*0.02*						*0.11*	
Control Delay	*7.3*						*8.5*	
LOS	*A*						*A*	
Approach Delay	*--*	*--*				*8.5*		
Approach LOS	*--*	*--*				*A*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	NJC	Intersection	SR-177 / KAISER ROAD
Agency/Co.	HERNANDEZ, KROONE & ASSOCIATES	Jurisdiction	
Date Performed	1/23/2012	Analysis Year	EXISTING
Analysis Time Period	PM		
Project Description	11-1027		
East/West Street:	KAISER ROAD	North/South Street:	SR-177
Intersection Orientation:	North-South	Study Period (hrs):	0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	10	91	0	0	60	2
Peak-Hour Factor, PHF	0.75	0.75	0.75	0.75	0.75	0.75
Hourly Flow Rate, HFR	13	121	0	0	80	2
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	0	0	0	0	0	25
Peak-Hour Factor, PHF	0.75	0.75	0.75	0.75	0.75	0.75
Hourly Flow Rate, HFR	0	0	0	0	0	33
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (vph)	13						33	
C (m) (vph)	1528						985	
v/c	0.01						0.03	
95% queue length	0.03						0.10	
Control Delay	7.4						8.8	
LOS	A						A	
Approach Delay	--	--				8.8		
Approach LOS	--	--				A		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*NJC*	Intersection	*SR-177 / I-10 EB Off Ramp*
Agency/Co.	*Hernandez, Kroone & Associates*	Jurisdiction	
Date Performed	*12/2/2011*	Analysis Year	*Const w/o Project*
Analysis Time Period	*AM*		
Project Description	*11-1027*		
East/West Street:	*I-10 EB Off Ramp*	North/South Street:	*SR-177*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*0*	*2*	*6*	*23*	*0*	*0*
Peak-Hour Factor, PHF	*0.83*	*0.83*	*0.83*	*0.83*	*0.83*	*0.83*
Hourly Flow Rate, HFR	*0*	*2*	*7*	*27*	*0*	*0*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration			*TR*	*LT*		
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*56*	*3*	*9*
Peak-Hour Factor, PHF	*0.83*	*0.83*	*0.83*	*0.83*	*0.83*	*0.83*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*67*	*3*	*10*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*1*
Lanes	*0*	*0*	*0*	*1*	*1*	*1*
Configuration				*L*	*T*	*R*

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*				*L*	*T*	*R*
v (vph)		*27*				*67*	*3*	*10*
C (m) (vph)		*1624*				*936*	*818*	*1091*
v/c		*0.02*				*0.07*	*0.00*	*0.01*
95% queue length		*0.05*				*0.23*	*0.01*	*0.03*
Control Delay		*7.3*				*9.1*	*9.4*	*8.3*
LOS		*A*				*A*	*A*	*A*
Approach Delay	--	--				*9.1*		
Approach LOS	--	--				*A*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		**Site Information**	
Analyst	*NJC*	Intersection	*SR-177 / I-10 EB Off Ramp*
Agency/Co.	*Hernandez, Kroone & Associates*	Jurisdiction	
Date Performed	*12/2/2011*	Analysis Year	*Construction w/o Project*
Analysis Time Period	*PM*		

Project Description *11-1027*

East/West Street: *I-10 EB Off Ramp*	North/South Street: *SR-177*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*0*	*6*	*1*	*27*	*3*	*0*
Peak-Hour Factor, PHF	*0.97*	*0.97*	*0.97*	*0.97*	*0.97*	*0.97*
Hourly Flow Rate, HFR	*0*	*6*	*1*	*27*	*3*	*0*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration			*TR*	*LT*		
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*93*	*10*	*3*
Peak-Hour Factor, PHF	*0.97*	*0.97*	*0.97*	*0.97*	*0.97*	*0.97*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*95*	*10*	*3*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*1*
Lanes	*0*	*0*	*0*	*1*	*1*	*1*
Configuration				*L*	*T*	*R*

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*				*L*	*T*	*R*
v (vph)		*27*				*95*	*10*	*3*
C (m) (vph)		*1627*				*932*	*817*	*1087*
v/c		*0.02*				*0.10*	*0.01*	*0.00*
95% queue length		*0.05*				*0.34*	*0.04*	*0.01*
Control Delay		*7.2*				*9.3*	*9.5*	*8.3*
LOS		*A*				*A*	*A*	*A*
Approach Delay	--	--				*9.3*		
Approach LOS	--	--				*A*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	NJC	Intersection	*SR-177 / I-10 WB OFF RAMP*
Agency/Co.	*HERNANDEZ KROONE & ASSOCIATES*	Jurisdiction	
Date Performed	*12/2/2011*	Analysis Year	*Const wo Project Trips*
Analysis Time Period	*AM*		

Project Description	*11-1027*
East/West Street: *I-10 WB OFF RAMP*	North/South Street: *SR-177*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*0*	*58*	*0*	*0*	*23*	*71*
Peak-Hour Factor, PHF	*0.81*	*0.81*	*0.81*	*0.81*	*0.81*	*0.81*
Hourly Flow Rate, HFR	*0*	*71*	*0*	*0*	*28*	*87*
Percent Heavy Vehicles	*0*	*--*	*--*	*0*	*--*	*--*
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*8*	*26*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.81*	*0.81*	*0.81*	*0.81*	*0.81*	*0.81*
Hourly Flow Rate, HFR	*0*	*9*	*32*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*0*	*0*
Configuration		*LTR*				

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*			*LTR*				
v (vph)	*0*			*41*				
C (m) (vph)	*1487*			*916*				
v/c	*0.00*			*0.04*				
95% queue length	*0.00*			*0.14*				
Control Delay	*7.4*			*9.1*				
LOS	*A*			*A*				
Approach Delay	*--*	*--*		*9.1*				
Approach LOS	*--*	*--*		*A*				

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*NJC*	Intersection	*SR-177 / I-10 WB OFF RAMP*
Agency/Co.	*HERNANDEZ KROONE & ASSOCIATES*	Jurisdiction	
Date Performed	*12/2/2011*	Analysis Year	*Construction wo Project*
Analysis Time Period	*PM*		

Project Description *11-1027*

East/West Street: *I-10 WB OFF RAMP*	North/South Street: *SR-177*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*3*	*97*	*0*	*0*	*29*	*99*
Peak-Hour Factor, PHF	*0.85*	*0.85*	*0.85*	*0.85*	*0.85*	*0.85*
Hourly Flow Rate, HFR	*3*	*114*	*0*	*0*	*34*	*116*
Percent Heavy Vehicles	*0*	*--*	*--*	*0*	*--*	*--*
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*3*	*14*	*32*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.85*	*0.85*	*0.85*	*0.85*	*0.85*	*0.85*
Hourly Flow Rate, HFR	*3*	*16*	*37*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*0*	*0*
Configuration		*LTR*				

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*			*LTR*				
v (vph)	*3*			*56*				
C (m) (vph)	*1444*			*822*				
v/c	*0.00*			*0.07*				
95% queue length	*0.01*			*0.22*				
Control Delay	*7.5*			*9.7*				
LOS	*A*			*A*				
Approach Delay	*--*	*--*	*9.7*					
Approach LOS	*--*	*--*	*A*					

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TWO-WAY STOP CONTROL SUMMARY

General Information		**Site Information**	
Analyst	NJC	Intersection	SR-177 / KAISER ROAD
Agency/Co.	HERNANDEZ, KROONE & ASSOCIATES	Jurisdiction	
Date Performed	12/2/2011	Analysis Year	Const wo Project
Analysis Time Period	AM		
Project Description	11-1027		
East/West Street:	KAISER ROAD	North/South Street:	SR-177
Intersection Orientation:	North-South	Study Period (hrs):	0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	12	41	0	0	25	0
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR	13	45	0	0	27	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	0	0	0	0	0	35
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR	0	0	0	0	0	38
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (vph)	13						38	
C (m) (vph)	1600						1054	
v/c	0.01						0.04	
95% queue length	0.02						0.11	
Control Delay	7.3						8.5	
LOS	A						A	
Approach Delay	--	--				8.5		
Approach LOS	--	--				A		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*NJC*	Intersection	*SR-177 / KAISER ROAD*
Agency/Co.	*HERNANDEZ, KROONE & ASSOCIATES*	Jurisdiction	
Date Performed	*12/2/2011*	Analysis Year	*Construction wo Project*
Analysis Time Period	*PM*		
Project Description	*11-1027*		
East/West Street:	*KAISER ROAD*	North/South Street:	*SR-177*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*10*	*94*	*0*	*0*	*62*	*2*
Peak-Hour Factor, PHF	*0.75*	*0.75*	*0.75*	*0.75*	*0.75*	*0.75*
Hourly Flow Rate, HFR	*13*	*125*	*0*	*0*	*82*	*2*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*0*	*0*	*26*
Peak-Hour Factor, PHF	*0.75*	*0.75*	*0.75*	*0.75*	*0.75*	*0.75*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*0*	*0*	*34*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration					*LR*	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (vph)	*13*						*34*	
C (m) (vph)	*1526*						*982*	
v/c	*0.01*						*0.03*	
95% queue length	*0.03*						*0.11*	
Control Delay	*7.4*						*8.8*	
LOS	*A*						*A*	
Approach Delay	--	--				*8.8*		
Approach LOS	--	--				*A*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*NJC*	Intersection	*SR-177 / I-10 EB Off Ramp*
Agency/Co.	*Hernandez, Kroone & Associates*	Jurisdiction	
Date Performed	*1/23/2012*	Analysis Year	*Const with Project*
Analysis Time Period	*AM*		

Project Description	*11-1027*		
East/West Street:	*I-10 EB Off Ramp*	North/South Street:	*SR-177*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*0*	*2*	*6*	*41*	*0*	*0*
Peak-Hour Factor, PHF	*0.83*	*0.83*	*0.83*	*0.83*	*0.83*	*0.83*
Hourly Flow Rate, HFR	*0*	*2*	*7*	*49*	*0*	*0*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration			*TR*	*LT*		
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*140*	*3*	*9*
Peak-Hour Factor, PHF	*0.83*	*0.83*	*0.83*	*0.83*	*0.83*	*0.83*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*168*	*3*	*10*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*1*
Lanes	*0*	*0*	*0*	*1*	*1*	*1*
Configuration				*L*	*T*	*R*

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*				*L*	*T*	*R*
v (vph)		*49*				*168*	*3*	*10*
C (m) (vph)		*1624*				*872*	*763*	*1091*
v/c		*0.03*				*0.19*	*0.00*	*0.01*
95% queue length		*0.09*				*0.71*	*0.01*	*0.03*
Control Delay		*7.3*				*10.1*	*9.7*	*8.3*
LOS		*A*				*B*	*A*	*A*
Approach Delay	--	--				*10.0*		
Approach LOS	--	--				*B*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	NJC	Intersection	SR-177 / I-10 EB Off Ramp
Agency/Co.	Hernandez, Kroone & Associates	Jurisdiction	
Date Performed	1/23/2012	Analysis Year	Construction w Project
Analysis Time Period	PM		
Project Description	11-1027		
East/West Street:	I-10 EB Off Ramp	North/South Street:	SR-177
Intersection Orientation:	North-South	Study Period (hrs):	0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	0	6	1	61	3	0
Peak-Hour Factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Hourly Flow Rate, HFR	0	6	1	62	3	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	0	0	0	93	10	3
Peak-Hour Factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Hourly Flow Rate, HFR	0	0	0	95	10	3
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			1
Lanes	0	0	0	1	1	1
Configuration				L	T	R

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT				L	T	R
v (vph)		62				95	10	3
C (m) (vph)		1627				833	731	1087
v/c		0.04				0.11	0.01	0.00
95% queue length		0.12				0.38	0.04	0.01
Control Delay		7.3				9.9	10.0	8.3
LOS		A				A	A	A
Approach Delay	--	--				9.8		
Approach LOS	--	--				A		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*NJC*	Intersection	*SR-177 / I-10 WB OFF RAMP*
Agency/Co.	*HERNANDEZ KROONE & ASSOCIATES*	Jurisdiction	
Date Performed	*1/23/2012*	Analysis Year	*Const w Project Trips*
Analysis Time Period	*AM*		

Project Description *11-1027*	
East/West Street: *I-10 WB OFF RAMP*	North/South Street: *SR-177*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*0*	*142*	*0*	*0*	*41*	*75*
Peak-Hour Factor, PHF	*0.81*	*0.81*	*0.81*	*0.81*	*0.81*	*0.81*
Hourly Flow Rate, HFR	*0*	*175*	*0*	*0*	*50*	*92*
Percent Heavy Vehicles	*0*	*--*	*--*	*0*	*--*	*--*
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*8*	*78*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.81*	*0.81*	*0.81*	*0.81*	*0.81*	*0.81*
Hourly Flow Rate, HFR	*0*	*9*	*96*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*0*	*0*
Configuration		*LTR*				

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*			*LTR*				
v (vph)	*0*			*105*				
C (m) (vph)	*1453*			*841*				
v/c	*0.00*			*0.12*				
95% queue length	*0.00*			*0.43*				
Control Delay	*7.5*			*9.9*				
LOS	*A*			*A*				
Approach Delay	*--*	*--*	*9.9*					
Approach LOS	*--*	*--*	*A*					

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*NJC*	Intersection	*SR-177 / I-10 WB OFF RAMP*
Agency/Co.	*HERNANDEZ KROONE & ASSOCIATES*	Jurisdiction	
Date Performed	*1/23/2012*	Analysis Year	*Construction w Project*
Analysis Time Period	*PM*		
Project Description	*11-1027*		
East/West Street:	*I-10 WB OFF RAMP*	North/South Street:	*SR-177*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*3*	*97*	*0*	*0*	*63*	*183*
Peak-Hour Factor, PHF	*0.85*	*0.85*	*0.85*	*0.85*	*0.85*	*0.85*
Hourly Flow Rate, HFR	*3*	*114*	*0*	*0*	*74*	*215*
Percent Heavy Vehicles	*0*	*--*	*--*	*0*	*--*	*--*
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*3*	*14*	*32*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.85*	*0.85*	*0.85*	*0.85*	*0.85*	*0.85*
Hourly Flow Rate, HFR	*3*	*16*	*37*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*0*	*0*
Configuration		*LTR*				

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*			*LTR*				
v (vph)	*3*			*56*				
C (m) (vph)	*1284*			*762*				
v/c	*0.00*			*0.07*				
95% queue length	*0.01*			*0.24*				
Control Delay	*7.8*			*10.1*				
LOS	*A*			*B*				
Approach Delay	*--*	*--*	*10.1*					
Approach LOS	*--*	*--*	*B*					

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*NJC*	Intersection	*SR-177 / KAISER ROAD*
Agency/Co.	*HERNANDEZ, KROONE & ASSOCIATES*	Jurisdiction	
Date Performed	*1/23/2012*	Analysis Year	*Construction w Project*
Analysis Time Period	*AM*		
Project Description *11-1027*			
East/West Street: *KAISER ROAD*		North/South Street: *SR-177*	
Intersection Orientation: *North-South*		Study Period (hrs): *0.25*	

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*148*	*41*	*0*	*0*	*25*	*4*
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*
Hourly Flow Rate, HFR	*164*	*45*	*0*	*0*	*27*	*4*
Percent Heavy Vehicles	*0*	*--*	*--*	*0*	*--*	*--*
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*0*	*0*	*55*
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*0*	*0*	*61*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration					*LR*	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (vph)	*164*						*61*	
C (m) (vph)	*1595*						*1052*	
v/c	*0.10*						*0.06*	
95% queue length	*0.34*						*0.18*	
Control Delay	*7.5*						*8.6*	
LOS	*A*						*A*	
Approach Delay	*--*	*--*				*8.6*		
Approach LOS	*--*	*--*				*A*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*NJC*	Intersection	*SR-177 / KAISER ROAD*
Agency/Co.	*HERNANDEZ, KROONE & ASSOCIATES*	Jurisdiction	
Date Performed	*1/23/2012*	Analysis Year	*Construction w Project*
Analysis Time Period	*PM*		
Project Description	*11-1027*		
East/West Street:	*KAISER ROAD*	North/South Street:	*SR-177*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*10*	*94*	*0*	*0*	*62*	*2*
Peak-Hour Factor, PHF	*0.75*	*0.75*	*0.75*	*0.75*	*0.75*	*0.75*
Hourly Flow Rate, HFR	*13*	*125*	*0*	*0*	*82*	*2*
Percent Heavy Vehicles	*0*	*--*	*--*	*0*	*--*	*--*
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*4*	*0*	*144*
Peak-Hour Factor, PHF	*0.75*	*0.75*	*0.75*	*0.75*	*0.75*	*0.75*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*5*	*0*	*192*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration					*LR*	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (vph)	*13*						*197*	
C (m) (vph)	*1526*						*974*	
v/c	*0.01*						*0.20*	
95% queue length	*0.03*						*0.75*	
Control Delay	*7.4*						*9.6*	
LOS	*A*						*A*	
Approach Delay	*--*	*--*				*9.6*		
Approach LOS	*--*	*--*				*A*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*NJC*	Intersection	*SR-177 / I-10 EB Off Ramp*
Agency/Co.	*Hernandez, Kroone & Associates*	Jurisdiction	
Date Performed	*1/24/2012*	Analysis Year	*Const&Cumulative wo Project*
Analysis Time Period	*AM*		

Project Description	*11-1027*		
East/West Street:	*I-10 EB Off Ramp*	North/South Street:	*SR-177*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*0*	*2*	*6*	*39*	*7*	*0*
Peak-Hour Factor, PHF	*0.83*	*0.83*	*0.83*	*0.83*	*0.83*	*0.83*
Hourly Flow Rate, HFR	*0*	*2*	*7*	*46*	*8*	*0*
Percent Heavy Vehicles	*0*	*--*	*--*	*0*	*--*	*--*
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration			*TR*	*LT*		
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*85*	*3*	*25*
Peak-Hour Factor, PHF	*0.83*	*0.83*	*0.83*	*0.83*	*0.83*	*0.83*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*102*	*3*	*30*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*1*
Lanes	*0*	*0*	*0*	*1*	*1*	*1*
Configuration				*L*	*T*	*R*

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*				*L*	*T*	*R*
v (vph)		*46*				*102*	*3*	*30*
C (m) (vph)		*1624*				*872*	*763*	*1080*
v/c		*0.03*				*0.12*	*0.00*	*0.03*
95% queue length		*0.09*				*0.40*	*0.01*	*0.09*
Control Delay		*7.3*				*9.7*	*9.7*	*8.4*
LOS		*A*				*A*	*A*	*A*
Approach Delay	*--*	*--*				*9.4*		
Approach LOS	*--*	*--*				*A*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		**Site Information**	
Analyst	*NJC*	Intersection	*SR-177 / I-10 EB Off Ramp*
Agency/Co.	*Hernandez, Kroone & Associates*	Jurisdiction	
Date Performed	*12/2/2011*	Analysis Year	*Const&Cumulative wo Project*
Analysis Time Period	*PM*		

Project Description *11-1027*	
East/West Street: *I-10 EB Off Ramp*	North/South Street: *SR-177*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*0*	*9*	*2*	*29*	*3*	*0*
Peak-Hour Factor, PHF	*0.97*	*0.97*	*0.97*	*0.97*	*0.97*	*0.97*
Hourly Flow Rate, HFR	*0*	*9*	*2*	*29*	*3*	*0*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration			*TR*	*LT*		
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*93*	*10*	*3*
Peak-Hour Factor, PHF	*0.97*	*0.97*	*0.97*	*0.97*	*0.97*	*0.97*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*95*	*10*	*3*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*1*
Lanes	*0*	*0*	*0*	*1*	*1*	*1*
Configuration				*L*	*T*	*R*

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*				*L*	*T*	*R*
v (vph)		*29*				*95*	*10*	*3*
C (m) (vph)		*1621*				*921*	*807*	*1087*
v/c		*0.02*				*0.10*	*0.01*	*0.00*
95% queue length		*0.05*				*0.34*	*0.04*	*0.01*
Control Delay		*7.3*				*9.4*	*9.5*	*8.3*
LOS		*A*				*A*	*A*	*A*
Approach Delay	--	--				*9.3*		
Approach LOS	--	--				*A*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		**Site Information**	
Analyst	*NJC*	Intersection	*SR-177 / I-10 WB OFF RAMP*
Agency/Co.	*HERNANDEZ KROONE & ASSOCIATES*	Jurisdiction	
Date Performed	*1/24/2012*	Analysis Year	*Const&Cumulative wo Project*
Analysis Time Period	*AM*		

Project Description *11-1027*	
East/West Street: *I-10 WB OFF RAMP*	North/South Street: *SR-177*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*0*	*87*	*0*	*0*	*39*	*71*
Peak-Hour Factor, PHF	*0.81*	*0.81*	*0.81*	*0.81*	*0.81*	*0.81*
Hourly Flow Rate, HFR	*0*	*107*	*0*	*0*	*48*	*87*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*7*	*8*	*56*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.81*	*0.81*	*0.81*	*0.81*	*0.81*	*0.81*
Hourly Flow Rate, HFR	*8*	*9*	*69*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*0*	*0*
Configuration		*LTR*				

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*			*LTR*				
v (vph)	*0*			*86*				
C (m) (vph)	*1462*			*895*				
v/c	*0.00*			*0.10*				
95% queue length	*0.00*			*0.32*				
Control Delay	*7.5*			*9.4*				
LOS	*A*			*A*				
Approach Delay	--	--	*9.4*					
Approach LOS	--	--	*A*					

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*NJC*	Intersection	*SR-177 / I-10 WB OFF RAMP*
Agency/Co.	*HERNANDEZ KROONE & ASSOCIATES*	Jurisdiction	
Date Performed	*1/23/2012*	Analysis Year	*Const&Cumulative wo Project*
Analysis Time Period	*PM*		

Project Description *11-1027*

East/West Street: *I-10 WB OFF RAMP*	North/South Street: *SR-177*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*6*	*97*	*0*	*0*	*31*	*103*
Peak-Hour Factor, PHF	*0.85*	*0.85*	*0.85*	*0.85*	*0.85*	*0.85*
Hourly Flow Rate, HFR	*7*	*114*	*0*	*0*	*36*	*121*
Percent Heavy Vehicles	*0*	*--*	*--*	*0*	*--*	*--*
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*3*	*14*	*32*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.85*	*0.85*	*0.85*	*0.85*	*0.85*	*0.85*
Hourly Flow Rate, HFR	*3*	*16*	*37*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*0*	*0*
Configuration		*LTR*				

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*			*LTR*				
v (vph)	*7*			*56*				
C (m) (vph)	*1435*			*815*				
v/c	*0.00*			*0.07*				
95% queue length	*0.01*			*0.22*				
Control Delay	*7.5*			*9.7*				
LOS	*A*			*A*				
Approach Delay	*--*	*--*	*9.7*					
Approach LOS	*--*	*--*	*A*					

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*NJC*	Intersection	*SR-177 / KAISER ROAD*
Agency/Co.	*HERNANDEZ, KROONE & ASSOCIATES*	Jurisdiction	
Date Performed	*1/25/2012*	Analysis Year	*Const&Cumulative wo Project*
Analysis Time Period	*AM*		

Project Description	*11-1027*		
East/West Street:	*KAISER ROAD*	North/South Street:	*SR-177*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*71*	*41*	*0*	*0*	*25*	*2*
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*
Hourly Flow Rate, HFR	*78*	*45*	*0*	*0*	*27*	*2*
Percent Heavy Vehicles	*0*	*--*	*--*	*0*	*--*	*--*
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*0*	*0*	*51*
Peak-Hour Factor, PHF	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*	*0.90*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*0*	*0*	*56*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration					*LR*	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (vph)	*78*						*56*	
C (m) (vph)	*1597*						*1053*	
v/c	*0.05*						*0.05*	
95% queue length	*0.15*						*0.17*	
Control Delay	*7.4*						*8.6*	
LOS	*A*						*A*	
Approach Delay	*--*	*--*				*8.6*		
Approach LOS	*--*	*--*				*A*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	NJC	Intersection	SR-177 / KAISER ROAD
Agency/Co.	HERNANDEZ, KROONE & ASSOCIATES	Jurisdiction	
Date Performed	1/25/2012	Analysis Year	Const&Cumulative wo Project
Analysis Time Period	PM		
Project Description	11-1027		
East/West Street:	KAISER ROAD	North/South Street:	SR-177
Intersection Orientation:	North-South	Study Period (hrs):	0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	10	94	0	0	62	2
Peak-Hour Factor, PHF	0.75	0.75	0.75	0.75	0.75	0.75
Hourly Flow Rate, HFR	13	125	0	0	82	2
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	0	0	0	0	0	26
Peak-Hour Factor, PHF	0.75	0.75	0.75	0.75	0.75	0.75
Hourly Flow Rate, HFR	0	0	0	0	0	34
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (vph)	13						34	
C (m) (vph)	1526						982	
v/c	0.01						0.03	
95% queue length	0.03						0.11	
Control Delay	7.4						8.8	
LOS	A						A	
Approach Delay	--	--				8.8		
Approach LOS	--	--				A		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*NJC*	Intersection	*SR-177 / I-10 EB Off Ramp*
Agency/Co.	*Hernandez, Kroone & Associates*	Jurisdiction	
Date Performed	*1/24/2012*	Analysis Year	*Const&Cumulative w Project*
Analysis Time Period	*AM*		
Project Description	*11-1027*		
East/West Street:	*I-10 EB Off Ramp*	North/South Street:	*SR-177*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*0*	*2*	*6*	*57*	*7*	*0*
Peak-Hour Factor, PHF	*0.83*	*0.83*	*0.83*	*0.83*	*0.83*	*0.83*
Hourly Flow Rate, HFR	*0*	*2*	*7*	*68*	*8*	*0*
Percent Heavy Vehicles	*0*	*--*	*--*	*0*	*--*	*--*
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration			*TR*	*LT*		
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*169*	*3*	*25*
Peak-Hour Factor, PHF	*0.83*	*0.83*	*0.83*	*0.83*	*0.83*	*0.83*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*203*	*3*	*30*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*1*
Lanes	*0*	*0*	*0*	*1*	*1*	*1*
Configuration				*L*	*T*	*R*

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		*LT*				*L*	*T*	*R*
v (vph)		*68*				*203*	*3*	*30*
C (m) (vph)		*1624*				*812*	*711*	*1080*
v/c		*0.04*				*0.25*	*0.00*	*0.03*
95% queue length		*0.13*				*0.99*	*0.01*	*0.09*
Control Delay		*7.3*				*10.9*	*10.1*	*8.4*
LOS		*A*				*B*	*B*	*A*
Approach Delay	*--*	*--*				*10.6*		
Approach LOS	*--*	*--*				*B*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		**Site Information**	
Analyst	NJC	Intersection	SR-177 / I-10 EB Off Ramp
Agency/Co.	Hernandez, Kroone & Associates	Jurisdiction	
Date Performed	1/24/2012	Analysis Year	Const&Cumulative w Project
Analysis Time Period	PM		
Project Description	11-1027		
East/West Street:	I-10 EB Off Ramp	North/South Street:	SR-177
Intersection Orientation:	North-South	Study Period (hrs):	0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	0	9	2	63	3	0
Peak-Hour Factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Hourly Flow Rate, HFR	0	9	2	64	3	0
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration			TR	LT		
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	0	0	0	93	10	3
Peak-Hour Factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Hourly Flow Rate, HFR	0	0	0	95	10	3
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			1
Lanes	0	0	0	1	1	1
Configuration				L	T	R

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		LT				L	T	R
v (vph)		64				95	10	3
C (m) (vph)		1621				823	723	1087
v/c		0.04				0.12	0.01	0.00
95% queue length		0.12				0.39	0.04	0.01
Control Delay		7.3				9.9	10.0	8.3
LOS		A				A	B	A
Approach Delay	--	--				9.9		
Approach LOS	--	--				A		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*NJC*	Intersection	*SR-177 / I-10 WB OFF RAMP*
Agency/Co.	*HERNANDEZ KROONE & ASSOCIATES*	Jurisdiction	
Date Performed	*1/24/2012*	Analysis Year	*Const&Cumulative w Project*
Analysis Time Period	*AM*		

Project Description	*11-1027*		
East/West Street:	*I-10 WB OFF RAMP*	North/South Street:	*SR-177*
Intersection Orientation:	*North-South*	Study Period (hrs):	*0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*0*	*171*	*0*	*0*	*57*	*75*
Peak-Hour Factor, PHF	*0.81*	*0.81*	*0.81*	*0.81*	*0.81*	*0.81*
Hourly Flow Rate, HFR	*0*	*211*	*0*	*0*	*70*	*92*
Percent Heavy Vehicles	*0*	--	--	*0*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*7*	*8*	*108*	*0*	*0*	*0*
Peak-Hour Factor, PHF	*0.81*	*0.81*	*0.81*	*0.81*	*0.81*	*0.81*
Hourly Flow Rate, HFR	*8*	*9*	*133*	*0*	*0*	*0*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*0*	*0*
Configuration		*LTR*				

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*			*LTR*				
v (vph)	*0*			*150*				
C (m) (vph)	*1429*			*800*				
v/c	*0.00*			*0.19*				
95% queue length	*0.00*			*0.69*				
Control Delay	*7.5*			*10.5*				
LOS	*A*			*B*				
Approach Delay	--	--	*10.5*					
Approach LOS	--	--	*B*					

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	NJC	Intersection	SR-177 / I-10 WB OFF RAMP
Agency/Co.	HERNANDEZ KROONE & ASSOCIATES	Jurisdiction	
Date Performed	1/24/2012	Analysis Year	Const&Cumulative w Project
Analysis Time Period	PM		

Project Description	11-1027		
East/West Street:	I-10 WB OFF RAMP	North/South Street:	SR-177
Intersection Orientation:	North-South	Study Period (hrs):	0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	6	97	0	0	65	187
Peak-Hour Factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85
Hourly Flow Rate, HFR	7	114	0	0	76	219
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	3	14	32	0	0	0
Peak-Hour Factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85
Hourly Flow Rate, HFR	3	16	37	0	0	0
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	1	0	0	0	0
Configuration		LTR				

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT			LTR				
v (vph)	7			56				
C (m) (vph)	1278			755				
v/c	0.01			0.07				
95% queue length	0.02			0.24				
Control Delay	7.8			10.1				
LOS	A			B				
Approach Delay	--	--	10.1					
Approach LOS	--	--	B					

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TWO-WAY STOP CONTROL SUMMARY

General Information		**Site Information**	
Analyst	NJC	Intersection	SR-177 / KAISER ROAD
Agency/Co.	HERNANDEZ, KROONE & ASSOCIATES	Jurisdiction	
Date Performed	1/24/2012	Analysis Year	Const&Cumulative w Project
Analysis Time Period	AM		
Project Description	11-1027		
East/West Street:	KAISER ROAD	North/South Street:	SR-177
Intersection Orientation:	North-South	Study Period (hrs):	0.25

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	207	41	0	0	25	6
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR	230	45	0	0	27	6
Percent Heavy Vehicles	0	--	--	0	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	0	1	0	0	1	0
Configuration	LT					TR
Upstream Signal		0			0	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	0	0	0	0	0	71
Peak-Hour Factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Hourly Flow Rate, HFR	0	0	0	0	0	78
Percent Heavy Vehicles	0	0	0	0	0	0
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	0
Configuration					LR	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (vph)	230						78	
C (m) (vph)	1592						1050	
v/c	0.14						0.07	
95% queue length	0.51						0.24	
Control Delay	7.6						8.7	
LOS	A						A	
Approach Delay	--	--				8.7		
Approach LOS	--	--				A		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*NJC*	Intersection	*SR-177 / KAISER ROAD*
Agency/Co.	*HERNANDEZ, KROONE & ASSOCIATES*	Jurisdiction	
Date Performed	*1/24/2012*	Analysis Year	*Const&Cumulative w Project*
Analysis Time Period	*PM*		

Project Description *11-1027*

East/West Street: *KAISER ROAD*	North/South Street: *SR-177*
Intersection Orientation: *North-South*	Study Period (hrs): *0.25*

Vehicle Volumes and Adjustments

Major Street	Northbound			Southbound		
Movement	1	2	3	4	5	6
	L	T	R	L	T	R
Volume	*10*	*94*	*0*	*0*	*62*	*2*
Peak-Hour Factor, PHF	*0.75*	*0.75*	*0.75*	*0.75*	*0.75*	*0.75*
Hourly Flow Rate, HFR	*13*	*125*	*0*	*0*	*82*	*2*
Percent Heavy Vehicles	*0*	*--*	*--*	*0*	*--*	*--*
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*0*	*1*	*0*	*0*	*1*	*0*
Configuration	*LT*					*TR*
Upstream Signal		*0*			*0*	

Minor Street	Westbound			Eastbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume	*0*	*0*	*0*	*4*	*0*	*144*
Peak-Hour Factor, PHF	*0.75*	*0.75*	*0.75*	*0.75*	*0.75*	*0.75*
Hourly Flow Rate, HFR	*0*	*0*	*0*	*5*	*0*	*192*
Percent Heavy Vehicles	*0*	*0*	*0*	*0*	*0*	*0*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*0*
Configuration					*LR*	

Delay, Queue Length, and Level of Service

Approach	NB	SB	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	*LT*						*LR*	
v (vph)	*13*						*197*	
C (m) (vph)	*1526*						*974*	
v/c	*0.01*						*0.20*	
95% queue length	*0.03*						*0.75*	
Control Delay	*7.4*						*9.6*	
LOS	*A*						*A*	
Approach Delay	*--*	*--*				*9.6*		
Approach LOS	*--*	*--*				*A*		

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Appendix I

Cultural Resources – Tribal Contact List

Desert Harvest Tribal Contact List

ard Milanovich, Chairman
a Caliente Band of Cahuilla Indians
Dinah Shore Drive
Springs, CA 92264

les Wood, Chairman
nehuevi Indian Tribe
Box 1976
asu Lake, CA 92363

othy Williams, Chairman
Mojave Indian Tribe
Merriman Avenue
lles, CA 92363

Resvaloso, Chairwoman
es-Martinez Desert Cahuilla Indians
Box 1160
mal, CA 92274

Mary Ann Green, Chairwoman
Augustine Band of Cahuilla Indians
P.O. Box 846
Coachella, CA 92236

Sherry Cordova, Chairwoman
Cocopah Indian Tribe
14515 S. Veterans Dr
Somerton, AZ 85350

Keeny Escalanti, Sr., President
Fort Yuma Quechan Tribe
P.O. Box 1899
Yuma, AZ 85366-1899

Darrell Mike, Spokesman
Twenty-nine Palms Band of Mission Indians
46-200 Harrison Place
Coachella, CA 92236

David Roosevelt, Chairman
Cabazon Band of Mission Indians
84-245 Indio Springs Parkway
Indio, CA 92203-3449

Eldred Enas, Chairman
Colorado River Indian Tribes
26600 Mohave Road
Parker, AZ 85344

Robert Martin, Chairman
Morongo Band of Mission Indians
12700 Pumarra Rd.
Banning, CA 92220

Appendix J

Memorandum of Understanding between BLM and the National Park Service

February 24, 2011

Area where NPS and BLM are in complete agreement.

1. Scale back the footprint of the Desert Sunlight project to 4000 acres or less. Should Desert Sunlight or enXco Eagle Mtn Soliel not be developed, these areas will be withdrawn from future development.

2. Require First Solar (Desert Sunlight) to mitigate impacts to the park from its facility, including impacts to viewshed, air quality, natural sounds, wildlife, dark night skies, in close coordination with the NPS. Mitigation agreed on with the NPS will be included in the ROD.

3. Transfer the following BLM lands to the NPS: 1) the key hole at Mojave (i.e., the Viceroy Mine), 2) the "bowling alley" between Death Valley and Fort Irwin in CA (i.e., this is a narrow strip between the park and the military base and contains metal fragments from past bombing operations and the agencies will assure that liability issues are addressed), 3) the "saddle area" of Joshua Tree NP.

4. Companies seeking to site projects and any associated ancillary facilities within the viewshed or that could affect other resources or values of a unit of the National Park System will be deemed high conflict projects in accordance with the BLM pre-application and screening criteria set forth in the IMs. During the pre-application and screening process, the NPS will provide expertise and documentation of adverse impacts to park resources and values and in development or review of mitigation measures. If a proposal does not avoid areas where development would cause significant impacts to sensitive resources and values that are the basis of special designations or protections, the BLM may exercise its discretion to not accept and to reject the application.

5. Require a dedicated section in all renewable energy and transmission NEPA documents that addresses direct, indirect and cumulative impacts on units of National Park System or other areas under NPS management (like a national trail).

6. Companies seeking to site projects and any associated ancillary facilities in areas proposed for transfer to the NPS in the Feinstein legislation will be deemed high conflict projects in accordance with the BLM screening criteria set forth in the IMs. BLM will advise current wind testing row grant holders that any subsequent testing or development application would be treated as a high conflict application. If a proposal does not avoid areas where development would cause significant impacts to sensitive resources and values that are the basis of special designations or protections, the BLM may exercise its discretion to not accept and to reject the application.

7. In the Solar PEIS, preclude any additional renewable energy development projects on those lands excluded from the Desert Sunlight and enXco Eagle Mtn Soliel application footprints.

8. In the Solar PEIS reconfigure SEZs boundaries to exclude land near National Park Service units, including Joshua Tree NP. NPS and BLM will work together to determine these exclusion areas.

9. With respect to the Eagle Crest Energy Pumped Storage Project, agree to file an Intervention on the project in order to protect Joshua Tree NP.

Areas where BLM and NPS will continue to work closely together to protect park resources

1. Jointly address any new transmission line applications across Joshua Tree NP. The NPS understands that the Metropolitan Water Authority may have legislated rights on that ROW that may supercede any NPS or BLM authority.

2. Work closely with NPS to mitigate, move, or deny new transmission lines visible from key observations points as identified by the NPS with the exception of nationally designated corridors.

3. BLM will continue to work closely with the NPS to eliminate groundwater use within the Amargosa Valley through dry technology project requirements, advocating acquisition and retiring of existing groundwater allocations within the basin or other activities to eliminate water use in projects in the Amargosa Valley.

4. Understanding that the Eagle Mountain landfill on BLM lands near Joshua Tree NP is currently in litigation, once that litigation is settled, work closely with NPS to protect the resources of park.

2/24/201

2/24/2011

Appendix K

Cabazon Band Consultation Letter

June 15, 2012

Tiffany Thomas, Archaeologist
Bureau of Land Management
Renewable Energy Coordination Office
22835 Calle San Juan de los Lagos
Moreno Valley, CA 92553

Re.: Native American Consultation for EnXco Development Corporation's Desert Harvest Solar Farm Project and Transmission Line, Riverside County, California
LLCAD06000
CACA-49491/2800(P)

Dear Ms. Thomas:

Thank you for contacting the Cabazon Band of Mission Indians regarding the above referenced project.

We remain an interested party and do appreciate the offer to consult on a Government-to-Government basis at any time in the future on this project.

We look forward to continued collaboration in the preservation of cultural resources or areas of traditional cultural importance.

Sincerely,

Judy Stapp

Judy Stapp
Director of Cultural Affairs

Cc: David Roosevelt, Chairman
Cabazon Band of Mission Indians

John R. Kalish, Field Manager
Bureau of Land Management

84-245 INDIO SPRINGS PARKWAY • INDIO, CALIFORNIA 92203-3499 • (760) 342-2593 FAX (760) 347-7880

Appendix L

Memorandum of Understanding between BLM and the County of Riverside

SUBMITTAL TO THE BOARD OF SUPERVISORS
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA

901

MAY 9 1893

FROM: Planning Department

SUBMITTAL DATE:
April 12, 2012

SUBJECT: Memorandum of Understanding between the Bureau of Land Management (BLM) and County of Riverside regarding coordinated environmental review for the Desert Harvest Solar Project.

RECOMMENDED MOTION:

1. Approve the Memorandum of Understanding ("MOU") between the Bureau of Land Management (BLM) and County of Riverside regarding coordinated environmental review for the Desert Harvest Solar Project.

2. Authorize the Chairman of the Board to execute the attached Memorandum of Understanding.

Carolyn Syms Luna
Carolyn Syms Luna, Planning Director

(Continued on attached page)

FINANCIAL DATA	**Current F.Y. Total Cost:**	$ N/A	**In Current Year Budget:**	YES
	Current F.Y. Net County Cost:	$ N/A	**Budget Adjustment:**	NO
	Annual Net County Cost:	$ N/A	**For Fiscal Year:**	2011/2012

SOURCE OF FUNDS: Deposit-based fees.

Positions To Be Deleted Per A-30 ☐

Requires 4/5 Vote ☐

C.E.O. RECOMMENDATION: Approve as presented without the referenced schedule of deadlines.

APPROVE

County Executive Office Signature

BY: Denise C. Harden
Denise C. Harden

MINUTES OF THE BOARD OF SUPERVISORS

On motion of Supervisor Tavaglione, seconded by Supervisor Benoit and duly carried by unanimous vote, IT WAS ORDERED that the above matter is approved as recommended and IT WAS FURTHER ORDERED that the Executive Office's recommendation is incorporated herein.

Ayes: Buster, Tavaglione, Stone, Benoit and Ashley
Nays: None
Absent: None
Date: June 5, 2012
xc: Planning

Kecia Harper-Ihem
Clerk of the Board
By: [illegible]
Deputy

Prev. Agn. Ref. | **District:** 4/4 | **Agenda Number:** 3.49

Departmental Concurrence
DATE
TIFFANY N. NORTH
Policy ☑ Policy ☒
Consent ☐ Consent ☐
Per Exec. Ofc.:
Dept Recomm.:

ATTACHMENTS FILED
WITH THE CLERK OF THE BOARD

Revised 2/2

BACKGROUND:

enXco Development Corporation ("enXco") proposes to construct and operate a 150 megawatt (MW) solar photovoltaic (PV) energy-generating project known as the Desert Harvest Project ("Project"). The majority of the Project, including the solar power plant, will be located on Federal land managed by BLM. The solar power plant is not within the County's jurisdiction. The Project includes construction of a 12 mile generation transmission intertie line ("Gen-Tie") connecting the electrical output of the solar power plant to Southern California Edison's proposed Red Bluff Substation. A portion of the Gen-Tie will run under, along, across or upon the Kaiser Road rights-of-way and other areas within the County's jurisdiction.

enXco has applied for a Public Use Permit (PUP 914) pursuant to Ordinance No. 348. Other discretionary approvals by the County required for the Project include an encroachment permit and franchise pursuant to Ordinance No. 499 for the parts of the Project within the County's jurisdiction. Ordinance No. 499 provides that an encroachment permit may be issued if the applicant holds a current County franchise. The County is authorized to grant a franchise pursuant to Article 11, Section 7, of the California Constitution and Government Code Section 26001. The Project is also subject to the requirements of Board of Supervisors Policy B-29.

The Project requires environmental review under both the federal National Environmental Policy Act ("NEPA") and the California Environmental Quality Act ("CEQA"). The purpose of the MOU is to provide a framework for cooperation between the BLM and the County to work together in preparing and completing a joint environmental analysis and document that complies with NEPA and CEQA and to ensure the County's concerns are incorporated into the Project review.

FISCAL:

There are no financial impacts to the County associated with this item, as any applicable costs will be fully funded by the Project applicant.

MEMORANDUM OF UNDERSTANDING
between
THE BUREAU OF LAND MANAGEMENT
and
COUNTY OF RIVERSIDE

This MEMORANDUM OF UNDERSTANDING (MOU) is hereby entered into between the Bureau of Land Management, hereinafter referred to as the BLM, and the County of Riverside, hereinafter referred to as the County. The BLM and County are hereinafter referred together as the Parties.

A. INTRODUCTION and PURPOSE:

enXco Development Corporation (enXco) is proposing to build the 150 megawatt (MW) Desert Harvest Project, a solar photovoltaic energy generating facility including a 12 mile generation transmission intertie (Gen-Tie) line to the Red Bluff Substation (hereinafter referred to as "Project"). The 150 MW solar power plant site is entirely on federal land but the Gen-Tie would be within County road rights-of-way and other areas within the County's jurisdiction. The federal lands are subject to BLM jurisdiction, and enXco has applied for rights-of-way associated with the relevant federal lands pursuant to BLM regulations.

Because the County is required to make discretionary decisions to determine if enXco can construct the Gen-Tie, in accordance with California Environmental Quality Act (CEQA) guidelines, CEQA is triggered. Such discretionary decisions include a public use permit, franchise agreement or other similar development agreement, and encroachment permits. The BLM will begin preparing an Environmental Impact Statement (EIS) in September 2011 in compliance with 1508.11 of the National Environmental Policy Act of 1969 (NEPA), CEQA Statutes Section 21061 and CEQA Guidelines Sections 15120 to 15132, 15221, and all other applicable laws, executive orders, regulations, and direction. The BLM personnel will work with County staff to include discussion of the Gen-Tie elements, and write the EIS in a manner that complies with both CEQA and NEPA.

The purpose of this MOU is to provide a framework for cooperation between the BLM and the County to work together as lead agency and cooperating agency, in that order, in preparing and completing a joint environmental analysis and document that is in compliance with NEPA, CEQA, and all applicable laws, executive orders, regulations, direction, and guidelines. Work would include, but is not limited to, environmental and technical information collection, analysis and reporting. This Memorandum of Understanding includes meetings and/or conference calls as necessary for planning, information sharing, gathering and incorporating comments to the draft EIS to ensure CEQA compliance. Should the decision be made to authorize the Project, this Memorandum of Understanding continues the cooperation during construction of the Project, applying in particular to the Gen-Tie, and including the implementation of the mitigation measures and monitoring developed through the NEPA process. This cooperation serves the mutual interest of the Parties and the public.

B. STATEMENT OF MUTUAL BENEFIT AND INTERESTS:

The Council on Environmental Quality (CEQ) regulations (40 CFR 1506.2) direct federal agencies to cooperate with State and local agencies to the fullest extent possible to reduce duplication between NEPA and State and local requirements, including joint planning processes, environmental research and studies, public hearings, and environmental impact statements. The CEQ regulations (40 CFR 1501.6) provide for and describe both lead and cooperating agency status, and emphasize agency cooperation early in the NEPA process. For the purposes of this effort, BLM will be the lead agency developing one document in coordination with the County acting as Cooperating Agency. County will retain its approval authority for all aspects of the project within its jurisdiction. CEQA Statutes Section 21083.7 and CEQA Guidelines

3.49 JUN - 5 2012

Sections 15221and 15226 encourage similar cooperation by state and local agencies with federal agencies when environmental review is required under both CEQA and NEPA.

This MOU meets the intent of these regulations and provides guidance on the roles each agency will take. In consideration of the above premises, the Parties agree as follows:

C. BLM SHALL:

1. As lead Federal agency, be responsible for ensuring compliance with the requirements of NEPA, and the CEQ, and BLM regulations implementing NEPA, along with all applicable federal laws, executive orders, regulations and direction, and shall be responsible for the EIS and the scope and content of the portion of the EIS that relates to all necessary federal law and regulatory requirements;

2. Provide to the County for review and comment a draft of the Project Description and Alternatives section as soon as they are available to ensure that adequate detail is included to support County's review, analysis, and decisions;

3. Provide the administrative draft of the EIS to the County for its review and comment prior to the release of the public draft;

4. Schedule meetings as necessary with the County to discuss status updates, related findings, schedules and planning associated with the EIS;

5. Ensure that the BLM approved EIS contractor will complete the environmental analysis and prepare the EIS in a form and in substance that is consistent with this MOU and agreeable to the Parties;

6. Act as the intermediary, when necessary, for communications between the County and the EIS contractor related to the EIS;

7. Provide updated mailing lists to the EIS contractor for distributing the public notice of availability of the EIS to the public and to other Federal, State, and local agencies as required by law. The BLM shall provide updated mailing lists of the EIS, and Record of Decision to the public and to other Federal, State, and local agencies as required by law;

8. Publish the Notice of Intent (NOI) in the Federal Register and work with the EIS contractor to develop other public notices, and Notice of Availability of the document and ensure publication in appropriate periodicals;

9. Ensure that the contract with the EIS contractor incorporates the condition that the contractor will provide all graphic handouts and presentations for public meetings/hearings. The EIS contractor shall submit any such graphic presentations and/or handouts to the BLM for approval prior to distributing them at public meetings/hearings;

10. Be responsible for conducting public meetings and provide County with sufficient advanced noticed of these hearings so that the County can attend in a cooperating role;

II. Use its best efforts to ensure that the contract with the EIS contractor incorporates all of the following conditions:

(a) The EIS contractor agrees to defend, hold harmless and indemnify the BLM and County with respect to any and all claims, demands, cause(s) of action, and liabilities which may arise from the contractor's performance, purchases, or services utilized in the preparation of the EIS.

(b) The EIS contractor will sign a disclosure statement specifying that they have no financial or other interest in the outcome of the Project.

(c) The EIS contractor shall cooperate in defense of any appeal and/or suit involving the legality or adequacy of the BLM's or County's compliance with NEPA or CEQA with regard to this EIS.

(d) The EIS contractor will be responsible for all stenographic, clerical, graphics, layout, printing, and like work.

(f) The EIS contractor shall produce an internal administrative Draft EIS for review by the BLM and County prior to publication of the Draft EIS. The administrative draft shall include all text, maps, appendices, tables, charts, and other materials that will be incorporated in the Draft EIS for publication. As determined by both the BLM and County, the contractor shall provide a reasonable number of copies to each party to meet internal review needs.

(g) The Draft EIS will include evaluation of potential Gen-Tie routes, alternative designs, and impacts. The Draft and Final EIS will apply whichever NEPA and CEQA requirement is more stringent in the analysis. The Draft and Final EIS will describe any inconsistencies between Federal plans or laws as they pertain to the proposed action and describe the extent to which the BLM would reconcile the proposed action with the plan or law.

(h) Subject to Parties' comments during the environmental analysis and responses to the administrative Draft and Final EIS, the EIS contractor shall have primary responsibility for writing and rewriting all sections, parts, and chapters of the EIS.

(i) The County is a third-party beneficiary to the contract with the EIS contractor with the right to enforce contract provisions affecting the County's interests.

12. Provide oversight to the EIS contractor in filing the Draft and Final EIS with the U.S. Environmental Protection Agency (US EPA).

13. Reserve the right to prepare, at its option, selected sections of the Administrative Draft and/or Final EIS; as appropriate, the BLM will provide such prepared material in a time and manner consistent;

14. Be responsible for consulting with the United States Fish and Wildlife Service for a Section 7 Consultation and the California State Historic Preservation Officer for a Section 106 Consultation regarding proposed federal action; at the discretion of the BLM, the consultant shall furnish such data or information required to accomplish such consultation; the BLM shall include County staff in these meetings and discussions; act as the lead for Native American consultation;

15. As required, the BLM will be responsible for consulting with the California Department of Fish and Game;

16. Should the decision be made to authorize the Project, BLM and the County will jointly define appropriate field inspection responsibilities for ensuring implementation of the mitigation and monitoring activities adopted in the Record of Decision for the Gen-Tie portion of the project; and,

17. To the extent that CEQA or NEPA guidelines may preclude, or are potentially inconsistent with, construction of the proposed Project that is the subject of this MOU, the BLM will identify such potential inconsistencies at the beginning of the EIS process, and shall collaborate with the County and the contractor to ensure that sufficient information is collected during the course of the environmental assessment process to allow the BLM to begin an EIS for the Project to remove such inconsistencies and allow the Project to be carried forward.

D. COUNTY SHALL:

1. As the cooperating CEQA agency, be responsible to ensure that the EIS is in compliance with all requirements of CEQA and shall be responsible for the scope and content of the EIS that relates to all necessary aspects of CEQ A.

2. Should the level of detail in the EIS be insufficient in meeting CEQA standards, the BLM will continue the EIS development, and the County will perform a Environmental Impact Report or Mitigated Negative Declaration (whichever is required) separately, hiring its own consultants.

E. IT IS MUTUALLY AGREED AND UNDERSTOOD BY ALL PARTIES THAT:

1. Schedule of Deadlines. The BLM intends to make a decision on the Final EIS by August 6, 2012. Both Parties will attempt to meet this timeframe. Attached to this MOU is a draft detailed schedule, which the Parties intend to serve as a template for the actual schedule of deadlines that they intend to adhere to in completing the environmental review that is the subject of this MOU. The parties agree to modify and reach final agreement on the details of this draft schedule, which will include specific dates establishing the deadlines for expected deliverables from the BLM/project proponent's contractor, as well as deadlines for the BLM and the County to respond to all materials provided by the BLM/project proponent's contractor, *within one month.* Once the details of this schedule are agreed to, the Parties shall undertake their best efforts to comply with *all* deadlines set forth in said schedule.

2. Contractor Selection. The project proponent's EIS contractor, Aspen Environmental Group, will be used for the preparation of the EIS. Aspen Environmental Group is on the County's list of qualified Environmental Impact Report consulting firms.

3. Agency Project Representatives. For the purpose of coordinating the responsibilities of the Parties for the preparation of the EIS on the Project, the persons listed below are the designated Agency Project Representatives of the Parties. Actual delivery of written notice to the following representatives, or such substitute representatives as the respective Parties may hereinafter designate, shall constitute notice to that organization. The principal contacts for this instrument are:

BLM	**County Representative**
Name: Lynnette A. Elser	Name: Greg Neal, Deputy Planning Director
Title: Project Manager	Agency: Planning Department, County of Riverside
Address: 22835 Calle San Juan De Los Lagos	Address: 4080 Lemon Street, 12th Flr.
Address: Moreno Valley, CA 92553	Address: PO Box 1409, Riverside, CA 92501
Phone: (951) 697- 5387	Phone: (951) 955-3200
FAX: (951) 697- 5299	FAX: (951) 955-1817
E-Mail: lelser@blm.gov	E-Mail: GNEAL@rctlma.org

4. Regular Consultation between Parties. The successful preparation of the EIS requires complete and full communication between all Parties involved. It is the duty of the Agency Project Representatives to ensure close consultation throughout the document preparation and review process. Accordingly:

(a) The Agency Project Representatives shall keep each other advised of the developments affecting the preparation of the Draft EIS. Toward this end, and to ensure close consultation and coordination, the Agency Project Representatives shall conduct conference calls as necessary and shall meet face-to-face at least once every two months or as deemed necessary.

(b) In the event that either Agency Project Representative is unable to participate in any such regularly scheduled conference call or meeting, an alternate shall be delegated to represent that Agency Project Representative's party in said call or meeting.

(c) The BLM recognizes the need for the County to work directly with the EIS contractor with regard to the Gen-Tie and CEQA requirements. The County will keep the BLM informed of these discussions and will involve the BLM when appropriate.

(d) Consistent with existing laws and regulations, the Parties agree to share all relevant information.

(e) Any and all media releases and/or public mail-outs shall be made with the joint approval and at the direction of the BLM and the County.

5. Scope and Content of the EIS. The BLM and the EIS contractor shall schedule and conduct scoping meetings at the beginning of the process. These meetings will be held to determine the areas of public and agency concerns pertaining to the proposed Project, and guide the Parties in scoping the EIS. The BLM in coordination with the County as a cooperating agency shall determine the final scope of the EIS. The Agency Project Representatives shall determine (with approval, if necessary, from the signatories to this MOU or their delegates):

(a) The scope and content of the EIS for the Project to ensure that the requirements of the various federal and state statutes (i.e. - NEPA, CEQA, County standards and policies) are met and that the statutory findings required of the BLM and County for their respective decisions on the Project can be made;

(b) Whether the work performed by the EIS contractor is satisfactory, and if not, how best to correct the deficiencies in the work; and

(c) The division of responsibilities among lead agencies and cooperating agencies.

6. County Revisions. County may request revision of the administrative draft with further agency review.

7. Consultation with Other Agencies. The BLM and County reserve the right to consult directly, without notice or report, with other Federal, State, and local officials regarding their areas of specific responsibility outlined in Section C and D above during the preparation of the EIS to ensure objectivity and compliance with NEPA and CEQA. The Parties will immediately notify each other and the contractor if matters discussed at any such consultation will require significant changes in the development of the EIS or require significant costs pursuant to this Memorandum of Understanding.

8. Privileged and Confidential Information. The BLM and the EIS contractor will, upon request, provide County with procedures and underlying data used in developing submitted sections of the Draft and/or Final EIS including, but not limited to, final reports, subcontractor reports, and interviews with concerned private and public parties, whether or not such information is contained in the working papers or the Draft or Final EIS. The Parties intend that information that is otherwise protected from disclosure under the attorney-client privilege, work-product privilege, and deliberative process privilege and/or any other applicable privilege may be exchanged without waiving or compromising such privileges or doctrines. The Parties agree that privileged information received from the other party shall be treated and maintained as confidential to the extent allowed by federal and state laws, regulations and policies. Parties agree to label as "Confidential" documents that they believe are privileged and should not be disclosed. Neither Party will disclose privileged information received from the other Party, regardless of whether it is labeled "Confidential," without first notifying other Party. The BLM will obtain information that they maintain is confidential directly from BLM.

9. Freedom of Information Act. Any information furnished to the BLM under this Memorandum of Understanding is subject to the Freedom of Information Act (5 U.S.C. 552).

10. Effective Dates. This MOU is executed as of the date of the last signature and is effective through, or the date on which all mitigation measures required in connection with approval of the Project have been fully implemented, whichever date is earlier, at which time it will expire unless extended.

11. Modification. Modifications to this MOU shall be made only by mutual written consent of the Parties, by the issuance of a written instrument, signed and dated by all Parties.

12. Termination. Either of the Parties, in writing, may terminate this MOU in whole, or in part, at any time before the date of expiration upon 30 days written notice to the other party. During any such 30-day waiting period, the Parties will actively attempt to resolve any disagreement between them. In the event of termination of this MOU, both the BLM and County shall have access to all documentation, reports, analyses, and data developed by the contractor.

13. Rights and Responsibilities of Parties. This MOU sets forth the Parties' rights and responsibilities for preparing the EIS, and for subsequent activities related to the document. This MOU in no way restricts the BLM or the County from participating in similar activities with other public or private agencies, organizations, and individuals. This MOU does not authorize the transfer of funds between parties. Each Party is responsible for its own acts and omissions in collection with activities undertaken pursuant to this MOU.

THE PARTIES HERETO have executed this instrument

Teresa A Raml
Bureau of Land Management

11/2/11
Date

County of Riverside
JOHN TAVAGLIONE
CHAIRMAN, BOARD OF SUPERVISORS

6-5-12
Date

FORM APPROVED COUNTY COUNSEL
BY: TIFFANY N. NORTH 5/24/12
DATE

ATTEST:
KECIA HARPER-IHEM, Clerk
By
DEPUTY

349 JUN - 5 2012

Appendix M

Comments on the Draft EIS

APPENDIX M – PUBLIC COMMENT LETTERS

This appendix of the Desert Harvest Solar Project Final EIS and Proposed CDCA Plan Amendment includes the full text of comments received on the Draft EIS. Each comment letter is bracketed with an alphanumeric code to delineate discrete comments or concepts. Each bracketed comment has received an individual response in this Final EIS. Appendix N provides responses to all comments.

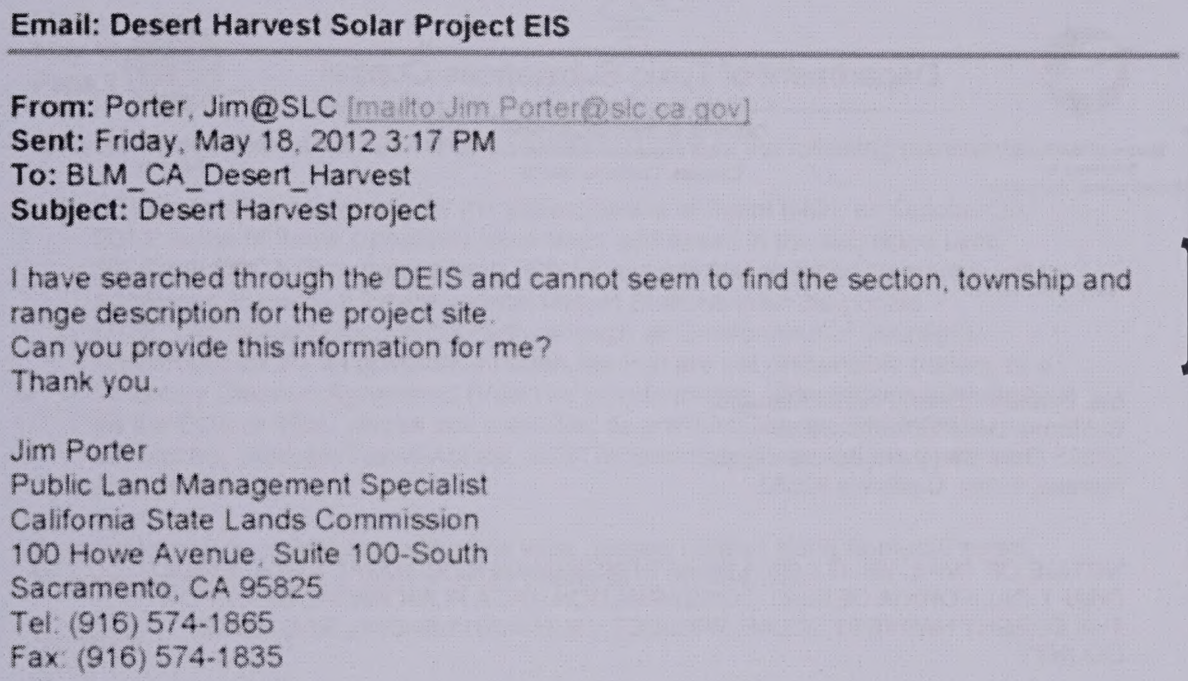
Table M-1. Comments Received on the Draft EIS

Comment Number	Date	Commenter
A – Public Agencies		
A001	5/18/12	Jim Porter, Public Land Management Specialist California State Lands Commission
A002	5/18/12	Rafiq Ahmed, Project Manager Brownfields & Environmental Restoration Program California Department of Toxic Substances Control
A003	7/1/12	Jason Neuman Captain, Strategic Planning Bureau Riverside County Fire Department
A004	7/9/12	Christine S. Lehnertz Regional Director, Pacific West Region National Park Service
A005	7/18/12	Jay Olivas, Planner IV Riverside County Planning Department Traffic Division
A006	7/13/12	Christopher S. Harris, Acting Executive Director Colorado River Board of California
A007	7/13/12	J. C. Jay Chen, Supervising Hydraulic Engineer Colorado River Board of California
A008	7/12/12	Assistant Field Supervisor U.S. Department of the Interior – Fish & Wildlife Service
A009	7/12/12	Deirdre West, Manager, Environmental Planning Team Metropolitan Water District of So Calif
A010	7/13/12	Enrique Manzanilla, Director Communities & Ecosystems Division U.S. Environmental Protection Agency
A011	7/17/12	Tiffany N. North, Deputy County Counsel Office of Riverside County Counsel
A012	7/13/12	Magdalena Rodriguez California Department of Fish and Game
B – Groups & Organizations & Companies		
B001	5/9/12	Donna Charpied, Desert Protection Society
B002	5/9/12	Kevin Emmerich, Basin & Range Watch
B003	5/21/12	Robert R. Clark, National Account Manager, FreightCenter.com

Table M-1. Comments Received on the Draft EIS

Comment Number	Date	Commenter
B004	7/16/12	Richard Drury, Laborers Intl Union of North America, Local Union 1184
B005	7/2/12	Seth Shteir, California Desert Field Representative, National Parks Conservation Association
B006	7/12/12	Ileene Anderson, Biologist/Desert Program Director Lisa T. Belenky, Senior Attorney Center for Biological Diversity
B007	7/13/12	Ernest Goitein, People for Land and Nature (PLAN)
B008	7/17/12	Donna Charpied, Desert Protection Society; and Kevin Emmerich, Basin & Range Watch
B009	7/17/12	Jeff Aardahl, Calif Representative, Defenders of Wildlife Johanna Wald, Senior Counselor, Natural Resources Defense Council; Barbara Boyle, Senior Representative, Beyond Coal Campaign, Sierra Club; Sally Miller, Senior Regional Conservation Representative, The Wilderness Society
B010	7/17/12	Kenneth Stein, Environmental Manager, Desert Sunlight Holdings, LLC
B011	7/17/12	Mekaela M. Gladden, Briggs Law Corporation, representing Californians for Renewable Energy (CARE) and La Cuna de Aztlan Sacred Sites Protection Circle Advisory Committee
C – Tribal Governments		
C001	6/15/12	Judy Stapp, Director of Cultural Affairs, Cabazon Band of Mission Indians
C002	7/13/12	Mary Ann Green, Tribal Chairperson, Augustine Band of Cahuila Indians
C003	7/17/12	Shute Mihaly & Weinberger LLP, representing Colorado Indian Tribes
D – Public Hearings		
D001	5/14/12	Afternoon session: • Alfredo Figueroa (Chemehuevi Tribe) • Lloyd Gunn (Desert Committee) • Matthew Johnson
D002	5/24/12	Evening session: • Seth Shteir (National Parks Conservation Association)
E – Private CItizens		
E001	4/13/12	Howard Wilshire, Ph.D.
E002	4/18/12	Paul Friesema
E003	4/27/12	Donna & Larry Charpied
E004	5/01/12	George Hepker
E005	5/14/12	Ruth Lindemann
E006	5/24/12	Sandra Fairchild
E007	6/22/12	Yanbao Ma, Assistant Professor, UC-Merced School of Engineering
E008	7/16/12	Philip M. Klasky
F – The Applicant		
F001	7/13/12	Ian Black, Solar Development, enXco

COMMENT SET A001
CALIFORNIA STATE LANDS COMMISSION



Email: Desert Harvest Solar Project EIS

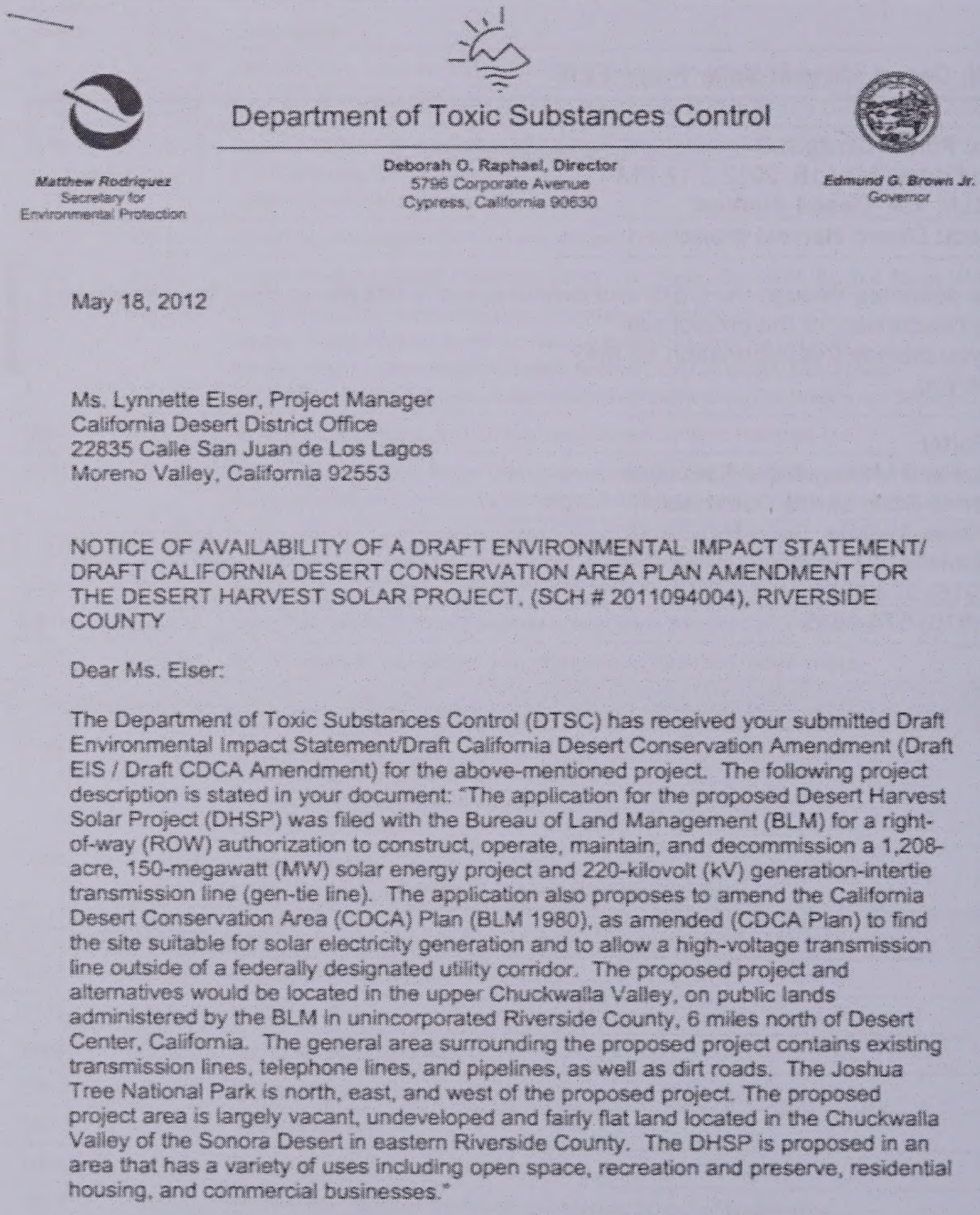
From: Porter, Jim@SLC [mailto:Jim.Porter@slc.ca.gov]
Sent: Friday, May 18, 2012 3:17 PM
To: BLM_CA_Desert_Harvest
Subject: Desert Harvest project

I have searched through the DEIS and cannot seem to find the section, township and range description for the project site.
Can you provide this information for me?
Thank you.

A001-1

Jim Porter
Public Land Management Specialist
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825
Tel: (916) 574-1865
Fax: (916) 574-1835

COMMENT SET A002
CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL



Department of Toxic Substances Control

Matthew Rodriquez
Secretary for
Environmental Protection

Deborah O. Raphael, Director
5796 Corporate Avenue
Cypress, California 90630

Edmund G. Brown Jr.
Governor

May 18, 2012

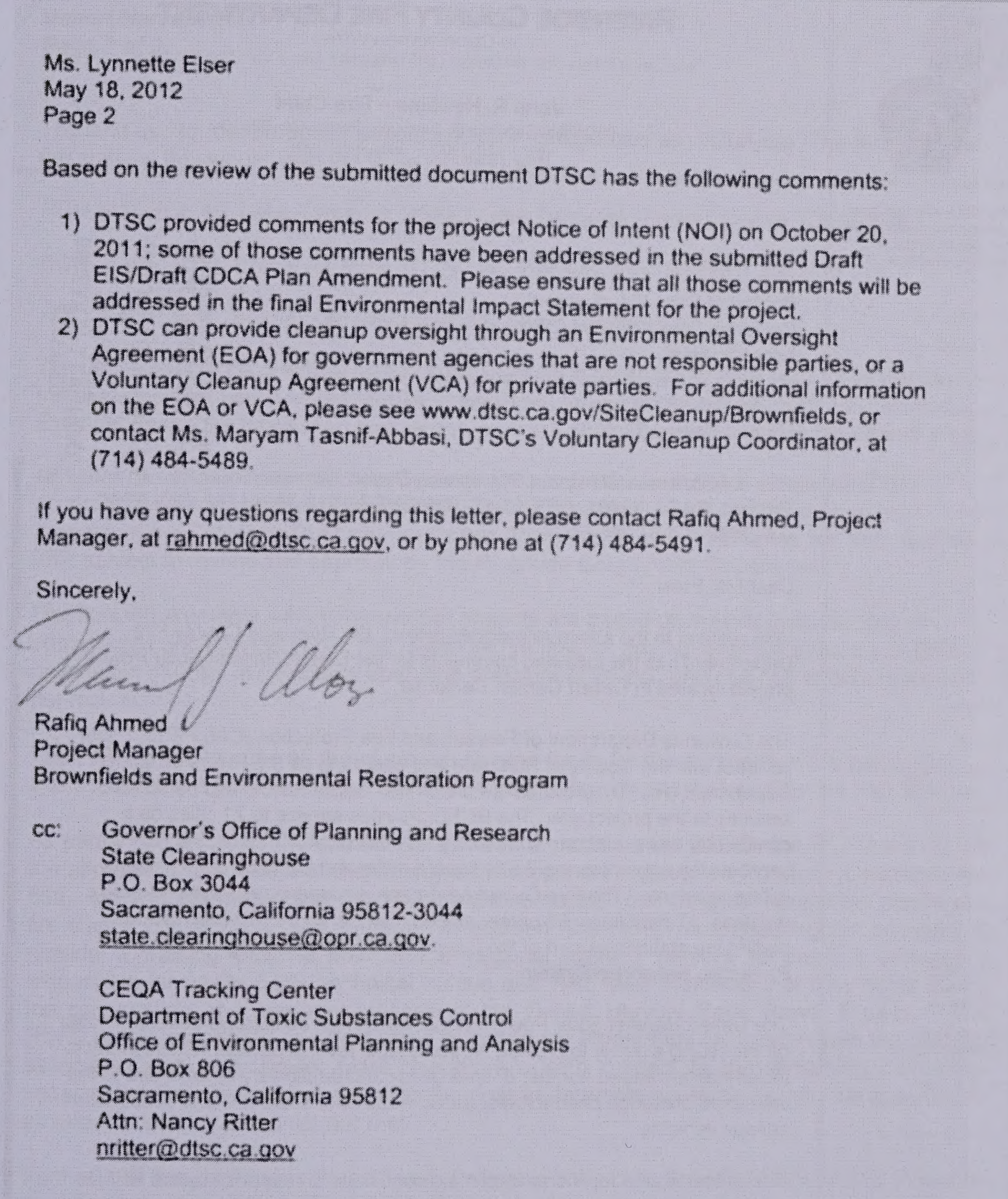
Ms. Lynnette Elser, Project Manager
California Desert District Office
22835 Calle San Juan de Los Lagos
Moreno Valley, California 92553

NOTICE OF AVAILABILITY OF A DRAFT ENVIRONMENTAL IMPACT STATEMENT/ DRAFT CALIFORNIA DESERT CONSERVATION AREA PLAN AMENDMENT FOR THE DESERT HARVEST SOLAR PROJECT, (SCH # 2011094004), RIVERSIDE COUNTY

Dear Ms. Elser:

The Department of Toxic Substances Control (DTSC) has received your submitted Draft Environmental Impact Statement/Draft California Desert Conservation Amendment (Draft EIS / Draft CDCA Amendment) for the above-mentioned project. The following project description is stated in your document: "The application for the proposed Desert Harvest Solar Project (DHSP) was filed with the Bureau of Land Management (BLM) for a right-of-way (ROW) authorization to construct, operate, maintain, and decommission a 1,208-acre, 150-megawatt (MW) solar energy project and 220-kilovolt (kV) generation-intertie transmission line (gen-tie line). The application also proposes to amend the California Desert Conservation Area (CDCA) Plan (BLM 1980), as amended (CDCA Plan) to find the site suitable for solar electricity generation and to allow a high-voltage transmission line outside of a federally designated utility corridor. The proposed project and alternatives would be located in the upper Chuckwalla Valley, on public lands administered by the BLM in unincorporated Riverside County, 6 miles north of Desert Center, California. The general area surrounding the proposed project contains existing transmission lines, telephone lines, and pipelines, as well as dirt roads. The Joshua Tree National Park is north, east, and west of the proposed project. The proposed project area is largely vacant, undeveloped and fairly flat land located in the Chuckwalla Valley of the Sonora Desert in eastern Riverside County. The DHSP is proposed in an area that has a variety of uses including open space, recreation and preserve, residential housing, and commercial businesses." A002-1

COMMENT SET A002, CONT.
CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL



Ms. Lynnette Elser
May 18, 2012
Page 2

Based on the review of the submitted document DTSC has the following comments:

1) DTSC provided comments for the project Notice of Intent (NOI) on October 20, 2011; some of those comments have been addressed in the submitted Draft EIS/Draft CDCA Plan Amendment. Please ensure that all those comments will be addressed in the final Environmental Impact Statement for the project.

A002-1 Cont.

2) DTSC can provide cleanup oversight through an Environmental Oversight Agreement (EOA) for government agencies that are not responsible parties, or a Voluntary Cleanup Agreement (VCA) for private parties. For additional information on the EOA or VCA, please see www.dtsc.ca.gov/SiteCleanup/Brownfields, or contact Ms. Maryam Tasnif-Abbasi, DTSC's Voluntary Cleanup Coordinator, at (714) 484-5489.

If you have any questions regarding this letter, please contact Rafiq Ahmed, Project Manager, at rahmed@dtsc.ca.gov, or by phone at (714) 484-5491.

A002-2

Sincerely,

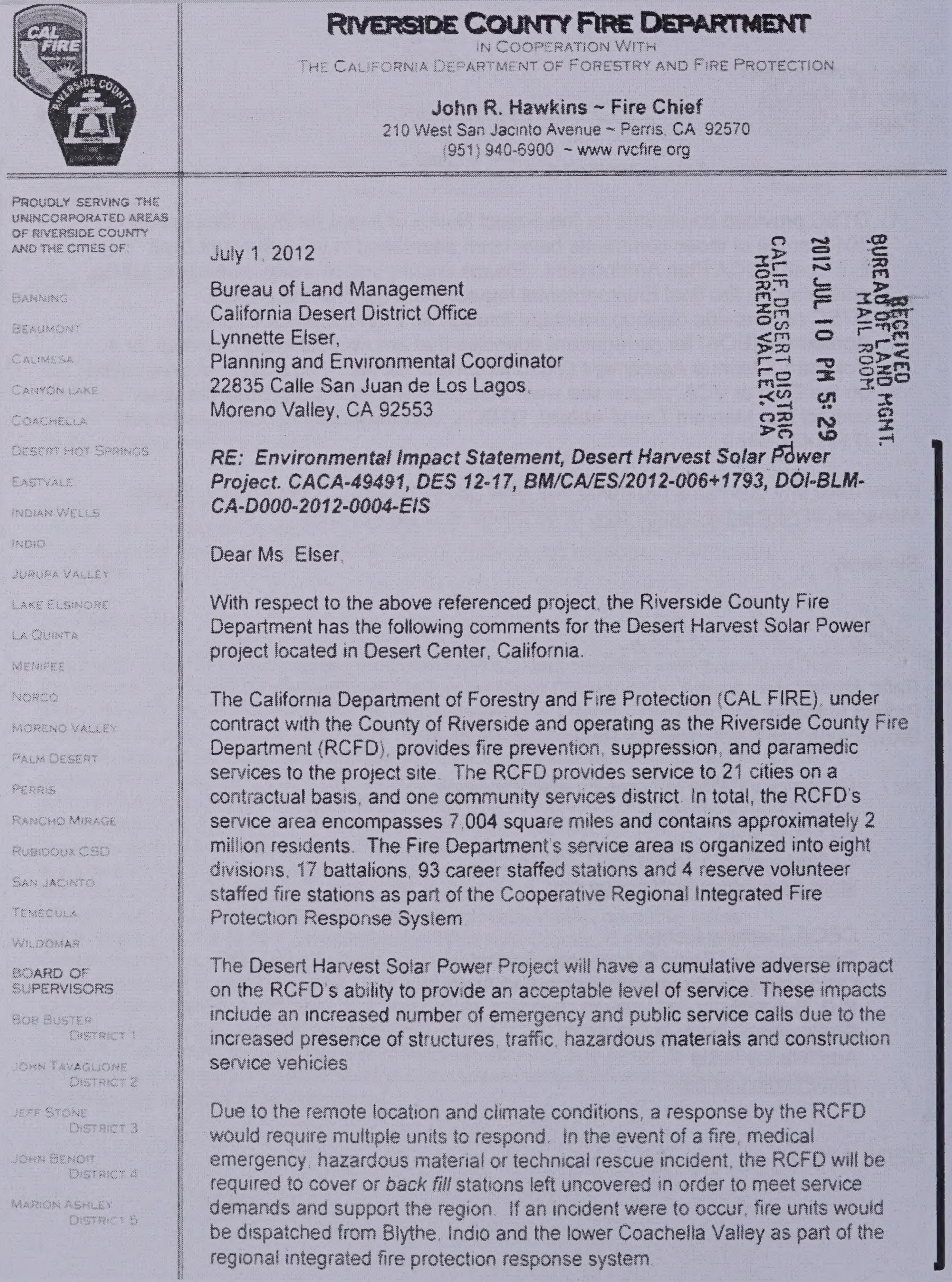
Rafiq Ahmed
Project Manager
Brownfields and Environmental Restoration Program

cc: Governor's Office of Planning and Research
State Clearinghouse
P.O. Box 3044
Sacramento, California 95812-3044
state.clearinghouse@opr.ca.gov.

CEQA Tracking Center
Department of Toxic Substances Control
Office of Environmental Planning and Analysis
P.O. Box 806
Sacramento, California 95812
Attn: Nancy Ritter
nritter@dtsc.ca.gov

CEQA # 3520

COMMENT SET A003
RIVERSIDE COUNTY FIRE DEPARTMENT



RIVERSIDE COUNTY FIRE DEPARTMENT
IN COOPERATION WITH
THE CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION

John R. Hawkins ~ Fire Chief
210 West San Jacinto Avenue ~ Perris, CA 92570
(951) 940-6900 ~ www rvcfire org

PROUDLY SERVING THE UNINCORPORATED AREAS OF RIVERSIDE COUNTY AND THE CITIES OF:

BANNING
BEAUMONT
CALIMESA
CANYON LAKE
COACHELLA
DESERT HOT SPRINGS
EASTVALE
INDIAN WELLS
INDIO
JURUPA VALLEY
LAKE ELSINORE
LA QUINTA
MENIFEE
NORCO
MORENO VALLEY
PALM DESERT
PERRIS
RANCHO MIRAGE
RUBIDOUX CSD
SAN JACINTO
TEMECULA
WILDOMAR

BOARD OF SUPERVISORS

BOB BUSTER
DISTRICT 1
JOHN TAVAGLIONE
DISTRICT 2
JEFF STONE
DISTRICT 3
JOHN BENOIT
DISTRICT 4
MARION ASHLEY
DISTRICT 5

RECEIVED
BUREAU OF LAND MGMT.
MAIL ROOM
2012 JUL 10 PM 5:29
CALIF. DESERT DISTRICT
MORENO VALLEY, CA

July 1, 2012

Bureau of Land Management
California Desert District Office
Lynnette Elser,
Planning and Environmental Coordinator
22835 Calle San Juan de Los Lagos,
Moreno Valley, CA 92553

RE: Environmental Impact Statement, Desert Harvest Solar Power Project. CACA-49491, DES 12-17, BM/CA/ES/2012-006+1793, DOI-BLM-CA-D000-2012-0004-EIS A003-1

Dear Ms. Elser,

With respect to the above referenced project, the Riverside County Fire Department has the following comments for the Desert Harvest Solar Power project located in Desert Center, California.

The California Department of Forestry and Fire Protection (CAL FIRE), under contract with the County of Riverside and operating as the Riverside County Fire Department (RCFD), provides fire prevention, suppression, and paramedic services to the project site. The RCFD provides service to 21 cities on a contractual basis, and one community services district. In total, the RCFD's service area encompasses 7,004 square miles and contains approximately 2 million residents. The Fire Department's service area is organized into eight divisions, 17 battalions, 93 career staffed stations and 4 reserve volunteer staffed fire stations as part of the Cooperative Regional Integrated Fire Protection Response System.

The Desert Harvest Solar Power Project will have a cumulative adverse impact on the RCFD's ability to provide an acceptable level of service. These impacts include an increased number of emergency and public service calls due to the increased presence of structures, traffic, hazardous materials and construction service vehicles.

Due to the remote location and climate conditions, a response by the RCFD would require multiple units to respond. In the event of a fire, medical emergency, hazardous material or technical rescue incident, the RCFD will be required to cover or *back fill* stations left uncovered in order to meet service demands and support the region. If an incident were to occur, fire units would be dispatched from Blythe, Indio and the lower Coachella Valley as part of the regional integrated fire protection response system.

COMMENT SET A003, CONT.
RIVERSIDE COUNTY FIRE DEPARTMENT

Desert Harvest EIS
Page 2 of 3

A003-1 Cont.

The land use for the proposed project would be categorized as – Outlying. The three closest fire stations that would respond to an incident are:

RCO Station # 49, Lake Tamarisk, 43880 Lake Tamarisk, Desert Center, CA 92239.

RCO Station # 45, Blythe Air Base, 17280 W., Hobson Way, Blythe, CA 92225

RCO Station # 43, Blythe, 140 West Barnard Street, Blythe, CA 92225

A003-2

The onsite conditions create a high risk potential for a technical rescue, and a hazardous materials incident which would require specialized equipment and trained staff to respond. Extended response times from specialized equipment can be anticipated to the project area.

A003-3

All water mains and fire hydrants providing required fire flows shall be constructed in accordance with local Laws, Ordinances, Regulations and Standards, the appropriate sections of the California Building/Fire Codes, Riverside County Ordinance No. 460, and No 787, subject to review and approval by the Riverside County Fire Department.

Fire flow requirements within commercial projects are based on square footage, type of construction and intended use. The minimum fire flow for any commercial structure is 1500 gallons per minute, at a residual operating pressure of 20-psi, and can rise to 8000 gallons per minute.

The EIS outlines the use of above ground storage tanks for the purposes of fire protection. The use of above ground storage tanks is subject to review and approval by the Fire Marshal

A003-4

As partial mitigation for the cumulative adverse impacts on the RCFD, the RCFD will require the applicant to participate in the County's Development Impact Fee Program (Ordinance No 659), which provides funding for capital improvements, such as land, equipment purchases fire station construction, and staffing. In addition, the RCFD is requesting the applicant to provide a training prop at two of the regional training centers to prepare emergency responders for onsite EMS, technical rescue and HAZ MAT incidents that may occur during the construction and operation phases of the Desert Harvest Solar Power Project. The RCFD is also requesting on-site training to familiarize emergency responders with the hazards associated with solar power plant operations. With respect to the remaining cumulative impacts, the Fire Department reserves the right to negotiate agreements with the applicant to ensure that service demands are met.

A003-5

Further, the Desert Harvest Solar Power Project is subject to Board of Supervisors' Policy B-29 Under Board of Supervisors' Policy B-29:

- No encroachment permit shall be issued for a solar power plant unless the Board of Supervisors first grants a franchise to the solar power plant owner.

COMMENT SET A003, CONT.
RIVERSIDE COUNTY FIRE DEPARTMENT

Desert Harvest EIS
Page 3 of 4

- No interest in the County's property, or the real property of any district governed by the County, shall be conveyed for a solar power plant unless the Board of Supervisors first approves a real property interest agreement with the solar power plant owner. **A003-5**

- No approval required by the County's Zoning or Subdivision Ordinance shall be given for a solar power plant unless the Board of Supervisors first approves a development agreement with the solar power plant owner and the development agreement is effective.

Board of Supervisors' Policy B-29 requires that all such agreements shall include a term requiring a solar power plant owner to make an annual payment to the County of $450 for each acre involved in the power production process and a term requiring a solar power plant owner to secure the payment of sales and use taxes. The purpose of the County's Solar Power Plant program, which includes General Plan Amendment No. 1080, Ordinance No. 348.4705, and Board of Supervisors' Policy No. B-29, is to ensure that the County can fully implement its General Plan; that the County does not disproportionately bear the burden of solar energy production; and that the County is compensated in an amount it deems appropriate for the use of its real property. Please be advised that because the Desert Harvest Solar Power Project proposes to use County road rights-of-way, the County is requiring the applicant to enter into a franchise agreement consistent with Board of Supervisors' Policy B-29.

In the event of an emergency, additional personnel will be necessary to staff required command and rescue specialist functions during an emergency incident and conduct a post incident analysis investigation, including writing incident reports required by OSHA and the Riverside County Fire Department. **A003-6**

New fire facilities may be needed in order to accommodate additional staffing and fire rescue apparatus. The specialized equipment will require proper storage and maintenance to ensure optional performance in the event of an emergency.

The summary of adverse impacts indicates *none* to fire/fuels management, public health and safety. It is premature to rule-out the impacts from fire will be reduced with the implementation of ongoing maintenance and a fuel modification program. There will always be a fire risk from accidental and natural causes within the project area. **A003-7** In addition, in the event the Photovoltaic panels become damaged the products may enter the atmosphere creating a toxic environment for plant workers and emergency service personnel. **`A003-8**

COMMENT SET A003, CONT.
RIVERSIDE COUNTY FIRE DEPARTMENT

Desert Harvest EIS
Page 4 of 4

The California Fire Code outlines fire protection standards for the safety, health, and welfare of the public. These standards will be enforced by the Fire Chief.

If I can be of further assistance, please feel free to contact me at (951) 840-8810 or e-mail at jason.neumann@fire.ca.gov

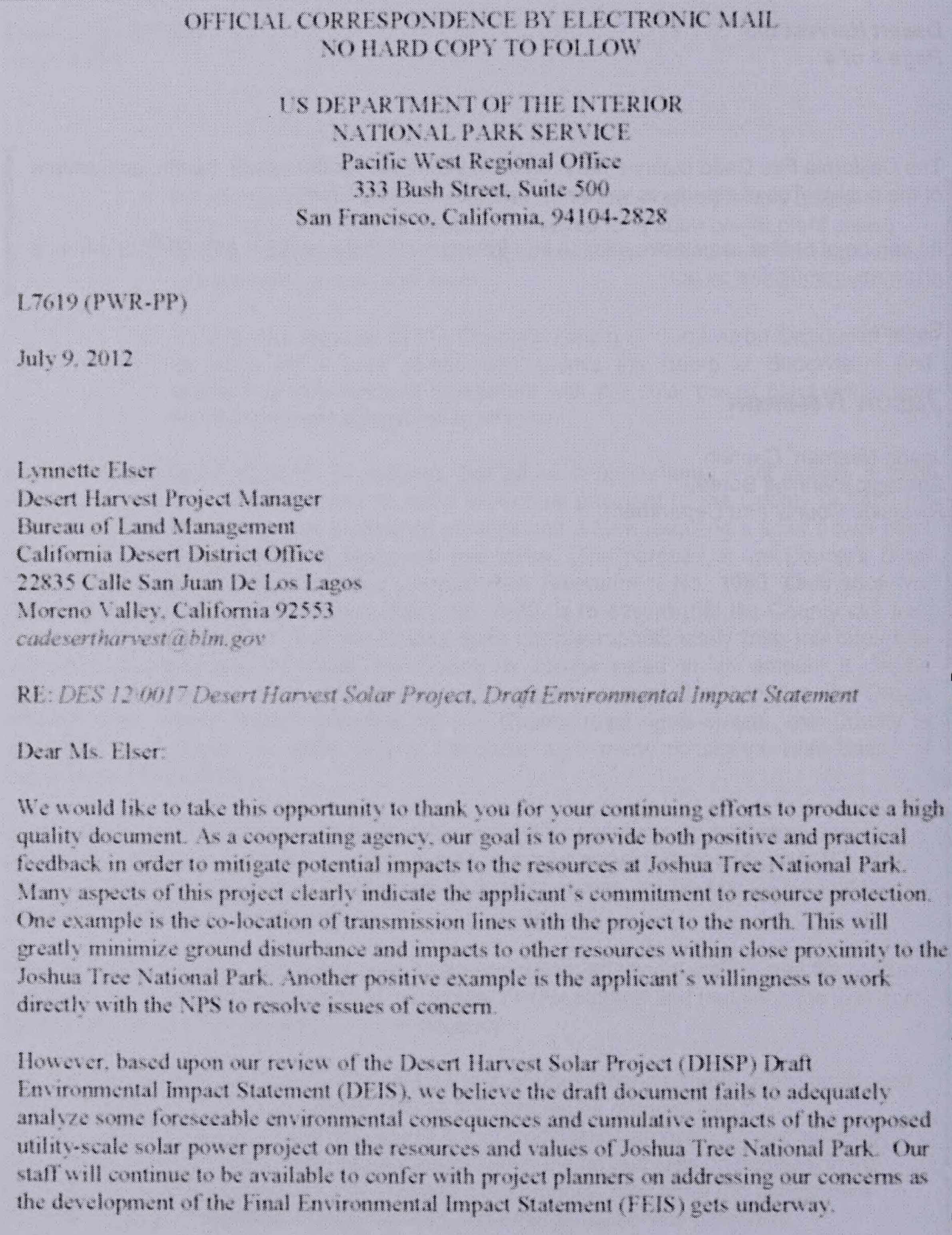
A003-8 Cont.

Sincerely,

Jason Neuman

Jason Neuman, Captain
Strategic Planning Bureau
Riverside County Fire Department

COMMENT SET A004
NATIONAL PARK SERVICE



OFFICIAL CORRESPONDENCE BY ELECTRONIC MAIL
NO HARD COPY TO FOLLOW

US DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
Pacific West Regional Office
333 Bush Street, Suite 500
San Francisco, California, 94104-2828

L7619 (PWR-PP)

July 9, 2012

Lynnette Elser
Desert Harvest Project Manager
Bureau of Land Management
California Desert District Office
22835 Calle San Juan De Los Lagos
Moreno Valley, California 92553
cadesertharvest@blm.gov

RE: *DES 12/0017 Desert Harvest Solar Project, Draft Environmental Impact Statement*

A004-1

Dear Ms. Elser:

We would like to take this opportunity to thank you for your continuing efforts to produce a high quality document. As a cooperating agency, our goal is to provide both positive and practical feedback in order to mitigate potential impacts to the resources at Joshua Tree National Park. Many aspects of this project clearly indicate the applicant's commitment to resource protection. One example is the co-location of transmission lines with the project to the north. This will greatly minimize ground disturbance and impacts to other resources within close proximity to the Joshua Tree National Park. Another positive example is the applicant's willingness to work directly with the NPS to resolve issues of concern.

However, based upon our review of the Desert Harvest Solar Project (DHSP) Draft Environmental Impact Statement (DEIS), we believe the draft document fails to adequately analyze some foreseeable environmental consequences and cumulative impacts of the proposed utility-scale solar power project on the resources and values of Joshua Tree National Park. Our staff will continue to be available to confer with project planners on addressing our concerns as the development of the Final Environmental Impact Statement (FEIS) gets underway.

COMMENT SET A004, CONT.
NATIONAL PARK SERVICE

Overall Comments

Joshua Tree National Park (Joshua Tree NP) was originally set aside as a National Monument in recognition of its historic and prehistoric resources and to afford protection of natural resources of the Colorado and Mojave Deserts. The natural resource preservation emphasis was so strong that the original name contemplated for the monument was Desert Plants National Park. The monument was also recognized as a biosphere reserve by the United Nations under its Man and the Biosphere Program. In 1994, the Desert Protection Act (PL 103-433) added 234,000 acres and changed National Monument status to National Park; and, an additional 163,000 acres was designated as Wilderness. A004-2

Today, Joshua Tree NP's nearly 800,000 acres protect the unique assembly of superlative natural resources brought together by the junction of two of California's ecosystems. The Colorado Desert, a western extension of the vast Sonoran Desert, influences the southern and eastern parts of the park. It is characterized by stands of spike-like ocotillo plants and "jumping" cholla cactus. The southern extent of the Mojave Desert reaches across the northern part of the park. It is the habitat of the park's namesake: the Joshua tree.

Unfortunately the DEIS fails to adequately characterize and analyze many potential impacts to the park resources associated with development of this project. The lack of clarity regarding the type of technology that will be erected, the potential impacts to visual resources (depending on the technology type) and potential issues related to groundwater need to be accurately defined and analyzed. Although attributes such as visual resources, natural sounds, night skies, and effects on Wilderness are referred to in the DEIS, the fundamental importance of these resources to the desert setting and sensitive areas such as Joshua Tree NP are either understated or overlooked in the analysis.

For example, on page 3.17-5 (referring to the Wilderness areas of Joshua Tree NP), *"This WA is approximately 17 miles to the west and 7 miles to the north of the DHSP site."* This statement is inaccurate. The nearest Wilderness boundaries of Joshua Tree NP are 3.8 miles to the west and 1.8 miles to the northeast of the DHSP. A004-3

Additionally, the western and eastern flanks of the Desert Harvest project are within close proximity to congressionally designated Wilderness. A survey conducted by the Joshua Tree NP, in November of 2010, identified the most important protected attributes/resources valued by our visitors. Of the nearly 500 visitors polled, the top three protected attributes/resources valued by our visitors are, 1) Views without development; 2) Clean air; and 3) Natural quiet/sounds of nature. Other high ranking attributes/resources valued by visitors include solitude and dark night skies. The aforementioned attributes/resources are the epitome of "wilderness character" that the Joshua Tree NP is striving to protect. All of these valued attributes/resources are jeopardized resulting from the Desert Harvest project. A004-4

A paramount concern of Joshua Tree NP relates to the visual contrast between First Solar-to the north-and the DHSP. The applicant (enXco), and as reflected as the preferred alternative by the BLM, has proposed the use of taller panels with tracking capabilities. The NPS has had many comments/concerns relating to the visual impacts of the First Solar Desert Sunlight project. A004-5

COMMENT SET A004, CONT.
NATIONAL PARK SERVICE

which is currently under construction immediately to the north of the proposed DHSP. Through numerous discussions/comments relating to color and guise of the low lying framework at the First Solar project, we believe these efforts have resulted in a less visually intrusive utility scale solar farm adjacent to a National Park. This DEIS fails to adequately assess or analyze the impacts of this newly proposed highly contrasting solar project within the Chuckwalla Valley. The change in glare, reflectance and color throughout the day need to be modeled and analyzed before any decision is made relating to the use of tracking-type solar panels. Visual analysis should not be limited solely to the project; contrasting visual impacts need to be analyzed for cumulative impacts as well. A004-5 Co

Summarized below are key concerns (more detailed comments are provided in the attached spreadsheet).

Specific Comments

Chapter 2: 2.5.4 Structures and Facilities, Photovoltaic and Generation Area A004-6

In paragraph 2 *"If a tracking system is used, either high-profile or low- profile trackers could be used."* The NPS is amenable to any alternative that is less visually intrusive. As mentioned above, visual resources or views without development are the highest valued attribute for park visitors. If low-profile tracking systems are readily available and would meet the purpose and need of the proposed project, low-profile trackers would like have less of an impact on visual resource. This would not preclude the necessity for further visual analysis or modeling, but offers a workable solution to mitigating visual impacts associated with tracking-systems.

Chapter 2: 2.5.8 Design Features, BMPs and Other Conditions Included in the Proposed Project - The Desert Harvest proposal is located in an area of notable night sky quality which is very sensitive. NPS data indicates that the eastern end of Joshua Tree NP possesses the highest quality night sky measured in the park. The NPS requests nightsky conditions be maintained (during construction and operations) at the current natural ambient level (i.e., no increase in light pollution.) A004-7

In Table 2.5 (Applicant Measures), best management practices relating to night sky are omitted from this table. At a minimum the FEIS should include mitigation or applicant measures that that specifically call out for the use of "full cut-off luminaries." Often the words shielded and full cut-off are erroneously used interchangeably. The DEIS refers to the use of "…focused downward, shielded…" in the Site Security, Fencing and Lighting section of Chapter 2.5.4. The word shielded should be replaced with "shielded, full cut-off luminaries." A004-8

Another applicant measure that should be included under a night sky heading is limited nighttime construction activity. If necessary to conduct work at night, white lighting (e.g., metal halide) should only be used when necessitated by work tasks. This source should not be used for general security lighting or for dusk-to-dawn lighting. White lighting should be less than 3500 Kelvin color temperature (warm white). Blue- white lighting (cool-white) has a much greater environmental impact and should be avoided. A004-9

COMMENT SET A004, CONT.
NATIONAL PARK SERVICE

If portable truck-mounted lighting is to be utilized frequently, it could have a significant visual impact if pointed in the direction of a natural area. It is recommended that such lighting be aimed within 45° of nadir (straight down) when utilized to minimize offsite impacts and reduce glare for workers, or alternatively be pointed away from park lands and Wilderness areas. This mitigation should be included in the FEIS.

A004-9 Cont.

Chapter 3: Affected Environment, 3.2 Air Resources
In Table 3.2-4 - Paragraph above Table says there are no Federal standards exceeded in the MDAB. However Table 3.2-4 shows the Federal 8 hour ozone standard was exceeded 17 times in 2008, 11 times in 2009 and 8 times in 2010. During the month May 2012, the Pinto Wells station located 9 miles north of DHSP has already recorded 3 days above 75ppb for ozone. Based on the data presented in Table 3.2-4, this area should be designated as non-attainment for 8 hour Ozone.

A004-10

Chapter 3: Affected Environment, Section 3.12.2, Existing Conditions, Noise – The information about noise sensitive land uses does not address the Wilderness areas of Joshua Tree NP – a discussion of the Wilderness and the natural ambient sound level (see above) should be added to this paragraph.

Many units of the National Park System, and park Wilderness areas in particular, have natural ambient sound levels well below the 45 dBA L_{eq} referenced as the rural noise standard for solar energy development in the Riverside County. Application of a 45 dBA L_{eq} standard to areas of the Riverside County, adjacent to sensitive park lands and Wilderness areas such as Joshua Tree NP could result in adverse impacts on those park lands and Wilderness areas. The NPS requests that ambient natural sound levels be maintained during construction and operations (i.e. no increase in ambient sound as a result of the project). Should a detectable increase in noise pollution be recorded, noise attenuating fencing will be erected at the project boundary.

A004-11

Chapter 3: Affected Environment, Section 3.14.1, Recreation – The Wilderness Act of 1964 section should also mention the BLM Palen/McCoy Wilderness to the east.

A004-12

Chapter 3: Affected Environment, Section 3.17, Special Designations – The FEIS should include a map showing proximity of all Wilderness areas to the site. Additionally, for the first paragraph under the Wilderness section, change the section slightly to reflect the Big Wash Trail, which is identified approximately 8 ½ miles west of the project area as specified in the attached table.

A004-13

Chapter 3: Affected Environment, Section 3.19, Visual Resources – Joshua Tree National Park would like to add a Key Observation Point (KOP) from which a visual analysis of the newly proposed "tracking system technology" can be modeled from. The UTM coordinates are Zone11; E 640617; N 3738874. This new KOP is accessed via a well maintained road that serves an access point to the "Big Wash" area of the park. This area serves as an easy ingress/egress staging area for night sky activity.

A004-14

The description of the affected visual environment analysis process does not mention the impact of light pollution. Both direct forms of light pollution (e.g., glare) and indirect (e.g., skyglow)

A004-15

COMMENT SET A004, CONT.
NATIONAL PARK SERVICE

A004-15 Co

cause impact to the visual environment. A development need not be within a line of sight as described in order to cause a visual impact via skyglow. This factor becomes increasingly important in darker environments, where even ground reflection from well-shielded lights can have an adverse impact. The visual resources analysis procedure is therefore incongruent with the need to protect dark night skies, though it may be adequate for daytime visibility issues.

The omission of dark night skies and the impacts associated with light pollution clearly understates the value of this critical resource. As mentioned above, dark night sky was among some of the high ranking attributes/resources valued by our visitors. A section relating to night sky should be included in the Affected Environment section. Data taken from Pinto Wells in Joshua Tree NP indicates that this area is the darkest measured in the park and is representative of the darkest sites found in the Mojave Desert. The site, which is periodically monitored by the NPS, is located approximately seven miles north of the project site.

A004-16

Chapter 4: Environmental Consequences, Section 4.2.3, Air Resources
Page 4.2-6 of Air Resources, addresses night sky visibility and points out dust would not be present at night. It should also address impairment of night sky visibility due to light pollution during construction and operation activities.

A004-17

Page 4.2-7-Air Resources. Are the regional and local "significance" thresholds based on project emissions before, or after, mitigation measures are applied? The report uses levels after mitigation. Decommissioning section states the area will be returned to original condition. This is unlikely and would take hundreds of years. This should be re-written so it does not mislead the public.

A004-18

Chapter 4: Environmental Consequences, Section 4.12, Noise and Vibration
Page 4.12-9 Kaiser Road south of Lake Tamarisk will increase between 9.5 dBA (1 hour Leq) and 11.4 dBA (CNEL). When the cumulative effects of the Desert Sunlight project are added the noise in this area increases from 11.6 (Leq) to 13.6 (CNEL). A 10 dBA increase is generally perceived as a doubling of the loudness.

A004-19

Chapter 6: List of Preparers
The NPS requests to be removed from the List of Preparers.

A004-20

Conclusion

Given the range of alternatives as currently identified and analyzed, and uncertainty relating to groundwater issues and the technology that will be used at DHSP, the DEIS fails to fully analyze impacts to protected park resources and values adjacent to the proposed project. As a cooperating agency, the NPS welcomes the opportunity to provide further input and comments on a more complete document. Furthermore, after another opportunity to review more specific impacts in the next version of the EIS, the NPS may want to enter a cost recovery agreement with enXco (and future plant owners) for monitoring the construction- and operation-related direct effects on park resources. The NPS requests this agreement between the applicant and the NPS be a condition of the ROW grant and be entered as such into the anticipated Record of Decision.

COMMENT SET A004, CONT.
NATIONAL PARK SERVICE

Thank you for this opportunity to provide comments. Addressing each of these topics in depth, and with reassessment of the nature of the impacts to nearby Joshua Tree NP is necessary for assuring the utmost protection of resources and visitor experience. If you have any questions regarding our comments or concerns, or need additional information, please contact Mark Butler, Superintendent, Joshua Tree National Park at (760) 367-5502, or Andrea Compton, Chief of Resources at (760) 367-5560, *Andrea_Compton@nps.gov*.

A004-20 Cont.

Sincerely,

/s/ Christine Lehnertz
(signed original on file)

Christine S. Lehnertz
Regional Director, Pacific West Region

Attachment:1

cc:
JOTR-S
WASO-GRD,EQD
OEPC-SF

6

COMMENT SET A004, CONT.
NATIONAL PARK SERVICE

NPS comments DEIS enXco Harvest

Comment No.	Section/ Paragraph/Pag	Comment	
1	2.5.4	The park service fully supports the use of low-height tracking systems.	A004-21
2	2.5.8	The Desert Harvest proposal is located in an area of notable night sky quality which is very sensitive. NPS data indicates that the eastern end of Joshua Tree NP possesses the highest quality night sky measured in the park. The NPS requests nightsky conditions be maintained (during construction and operations) at the current natural ambient level (i.e., no increase in light pollution.)In Table 2.5 (Applicant Measures), best management practices relating to night sky are omitted from this table. At a minimum the FEIS should include mitigation or applicant measures that that specifically call out for the use of "full cut-off luminaries." Often the words shielded and full cut-off are erroneously used interchangeably. The DEIS refers to the use of "...focused downward, shielded..." in the Site Security, Fencing and Lighting section of Chapter 2.5.4. The word shielded should be replaced with "shielded, full cut-off luminaries." Another applicant measure that should be included under a night sky heading is limited nighttime construction activity. If necessary to conduct work at night, white lighting (e.g., metal halide) should only be used when necessitated by work tasks. This source should not be used for general security lighting or for dusk-to-dawn lighting. White lighting should be less than 3500 Kelvin color temperature (warm white). Blue- white lighting (cool-white) has a much greater environmental impact and should be avoided. If portable truck-mounted lighting is to be utilized frequently, it could have a significant visual impact if pointed in the direction of a natural area. We recommend that such lighting be aimed within 45° of nadir (straight down) when utilized to minimize offsite impacts and reduce glare for workers, or alternatively be pointed away from park lands and Wilderness areas. This mitigation should be included in the FEIS.	A004-22 A004-23
3	throughout (2.5, 3.3, 4.3,	NPS would like to review the integrated weed management plan prior to implementation.	A004-24
4	3.2-4	Paragraph above Table says there are no Federal standards exceeded in the MDAB. However Table 3.2-4 shows the Federal 8 hour ozone standard was exceeded 17 times in 2008, 11 times in 2009 and 8 times in 2010.	A004-25
5	3.12-1	The FEIS should add information about NPS Management Policies (http://www.nps.gov/policy/mp/policies.html). These Policies address noise impacts in Section 4.9 and also in Section 8.2.3, which states that the "natural ambient sound level—that is, the environment of sound that exists in the absence of human-caused noise—is the baseline condition, and the standard against which current conditions in a soundscape will be measured and evaluated." Further guidance can be found in NPS Director's Order #47	A004-26
6	3.12-2	The discussion of noise sensitive land uses does not include a discussion the wilderness areas of Joshua Tree NP – a discussion of the Wilderness and the natural ambient sound level (see above) should be added to this paragraph.	A004-27

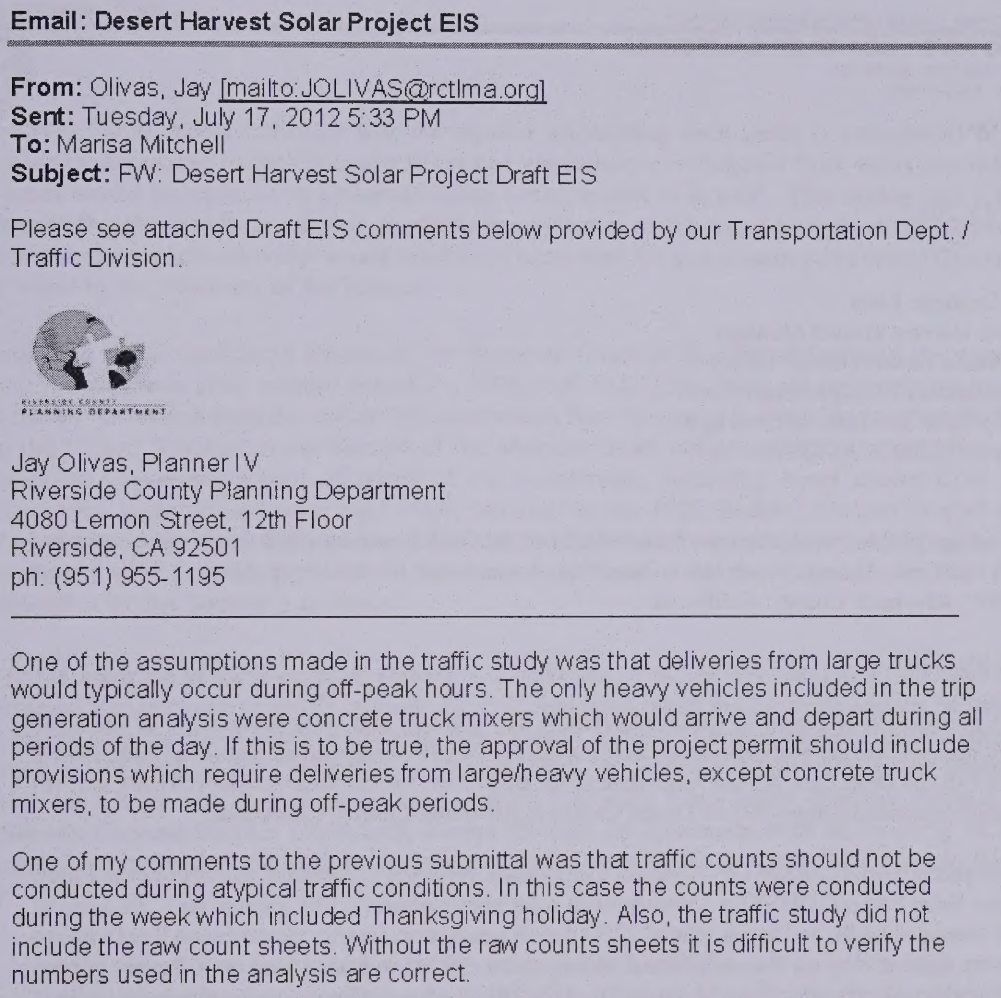
COMMENT SET A004, CONT.
NATIONAL PARK SERVICE

7	3.12-2 continued	National Park Service Management Policies require all acoustic conditions be evaluated against the natural ambient sound level. Many National Park units and park Wilderness areas, in particular, have natural ambient sound levels well below the 45 dBA Leq referenced as the rural noise standard for solar energy development in the Riverside County. Application of a 45 dBA Leq standard to areas of the Riverside County, adjacent to sensitive park lands and Wilderness areas such as Joshua Tree NP could result in adverse impacts on those park lands and Wilderness areas. The NPS requests that ambient natural sound levels be maintained during construction and operations (i.e. no increase in ambient sound as a result of the project.) Should a detectable increase in noise pollution be recorded, noise attenuating fencing will be erected at the project boundary.	A004-27 Cont.
8	3.17-5	*"This WA is approximately 17 miles to the west and 7 miles to the north of the DHSP site."* This statement is clearly inaccurate. The nearest wilderness boundaries of Joshua Tree National Park are 3.8 miles to the west and 1.8 miles to the northeast of the DHSP.	A004-28
9	3.19	Visual Resources- in the print version this is actually a repeat of the "Special Designations" section. The Webfiles CD is correct.	A004-29
10	3.19	Joshua Tree National Park would like to add a Key Observation Point (KOP) from which a visual analysis of the newly proposed "tracking system technology" can be modeled from. The UTM coordinates are Zone11; E 640617; N 3738874. This new KOP is accessed via a well maintained road that serves an access point to the "Big Wash" area of the park. This area serves as an easy ingress/egress staging area for night sky activity.	A004-30
11	3.19	Unfortunately, the description of the affected visual environment analysis process does not mention the impact of light pollution. Both direct forms of light pollution (e.g., glare) and indirect (e.g., skyglow) cause impact to the visual environment. A development need not be within a line of sight as described in order to cause a visual impact via skyglow. This factor becomes increasingly important in darker environments, where even ground reflection from well-shielded lights can have an adverse impact. The visual resources analysis procedure is therefore incongruent with the need to protect dark night skies, though it may be adequate for daytime visibility issues. The omission of dark night skies and the impacts associated with light pollution clearly understates the value of this critical resource. As mentioned above, dark night sky was among some of the high ranking attributes/resources valued by our visitors. A section relating to night sky should be included in the Affected Environment section. Data taken from Pinto Wells in Joshua Tree NP indicates that this area is the darkest measured in the park and is representative of the darkest sites found in the Mojave Desert. The site, which is periodically monitored by the NPS, is located approximately seven miles north of the project site.	A004-31
12	4.2-6	Addresses night sky visibility and points out dust would not be present at night. It should also address night sky visibility impairment from light pollution during construction and operation activities.	A004-32
13	4.2.7	Are the regional and local "significance" thresholds based on project emissions before or after mitigation measures are applied? The report uses levels after mitigation. Decommissioning section states the area will be returned to original condition. This is unlikely and would take hundreds of years. This should be re-written so it does not mislead the public.	A004-33
14	4.2-8	MM-Air 1 Where do the wind speed numbers come from? WS of 25-30 mph seem like very high thresholds to trigger action.	A004-34
15	4.2-8	MM-Air 1 Applicant shall install PM10 dust monitoring equipment where data triggers a response (to BLM/NPS) when particulate standards are exceeded. Realtime data shall be made available via the internet for offsite monitoring. Monitoring effort and dust abatement shall continue through the weekend and holidays.	A004-35
16	4.2-8	MM-Air 2 Should state maximum amount of time idling is allowed <1 minute, or better yet, no idling at all should be allowed.	A004-36
17	4.2-9	MM-Air 3 Is pavement necessary? What's worse more paved roads or dust?	A004-37

COMMENT SET A004, CONT.
NATIONAL PARK SERVICE

18	4.2-10	Last sentence has a typo, it should be Alternative 4 not 5. (Change 5 to 4).	A004-38
19	4.3.3/page 52	NPS requests to review applicant measures habitat compensation plan, Integrated weed management plan, etc...	A004-39
20	4.4-35	MM WIL-5 (Please Add) Copies of trip reports and annual reports will be forwarded to the NPS as aoon as available.	A004-40
		Cultural Resources General Comments	A004-41
21		The park agrees that the project area needs to have a complete Class III inventory to identify cultural resources. The park would like to request a copy of these reports when completed.	
22		The park is concerned that a thorough inventory and recordation of cultural resource be conducted within the project area and Determinations of Eligibility for the National Register of Historic Places completed prior to project design and implementation. This information will also provide context to sites located within the park. Of particular interest to the Park would be:	
		1. Prehistoric and historic transportation corridors that might lead into the park. These likely exist in the project area as Pinto Basin would have been a natural corridor. These transportation corridors would have provided the network for goods being imported and exported to and from the park.	
		2. Information on prehistoric lithic quarries would be important to the park because of the transport and trade implications.	
		3. Information on rock art also has region-wide implications regarding style, population movements, and spread of ideas.	
		4. Habitation sites with midden deposits could contribute significantly to a better understanding of prehistoric subsistence practices, lifeways, and land use within the park and the Colorado Desert.	
		5. Early Holocene Pinto sites occur in the vicinity of the project and are of particular concern.	
		6. The park contains some known but unrecorded unrecorded Patton WWII desert training center sites along the eastern base of the Coxcomb Mountains which should be considered in the District nomination (e.g. bombing range, target practice range). However, most of the eastern base of the Coxcomb Mountains has not been inventoried and virtually none of the park boundaries in the vicinity of the Desert Harvest project have been inventoried.	
		7. California Aqueduct related sites.	
		Cultural Landscapes	A004-42
23		No studies regarding prehistoric or historic cultural landscapes have been done in the eastern half of the park and the impact of this project on the viewshed or other indirect impacts therefore cannot be assessed at this time, but is of concern to the park.	
		Traditional Cultural Properties	
24		No studies regarding traditional cultural properties have been done in the park and the impact of this project on the viewshed or other indirect impacts therefore cannot be assessed at this time, but is of concern to the park.	

COMMENT SET A005
RIVERSIDE COUNTY PLANNING DEPARTMENT



Email: Desert Harvest Solar Project EIS

From: Olivas, Jay [mailto:JOLIVAS@rctlma.org]
Sent: Tuesday, July 17, 2012 5:33 PM
To: Marisa Mitchell
Subject: FW: Desert Harvest Solar Project Draft EIS

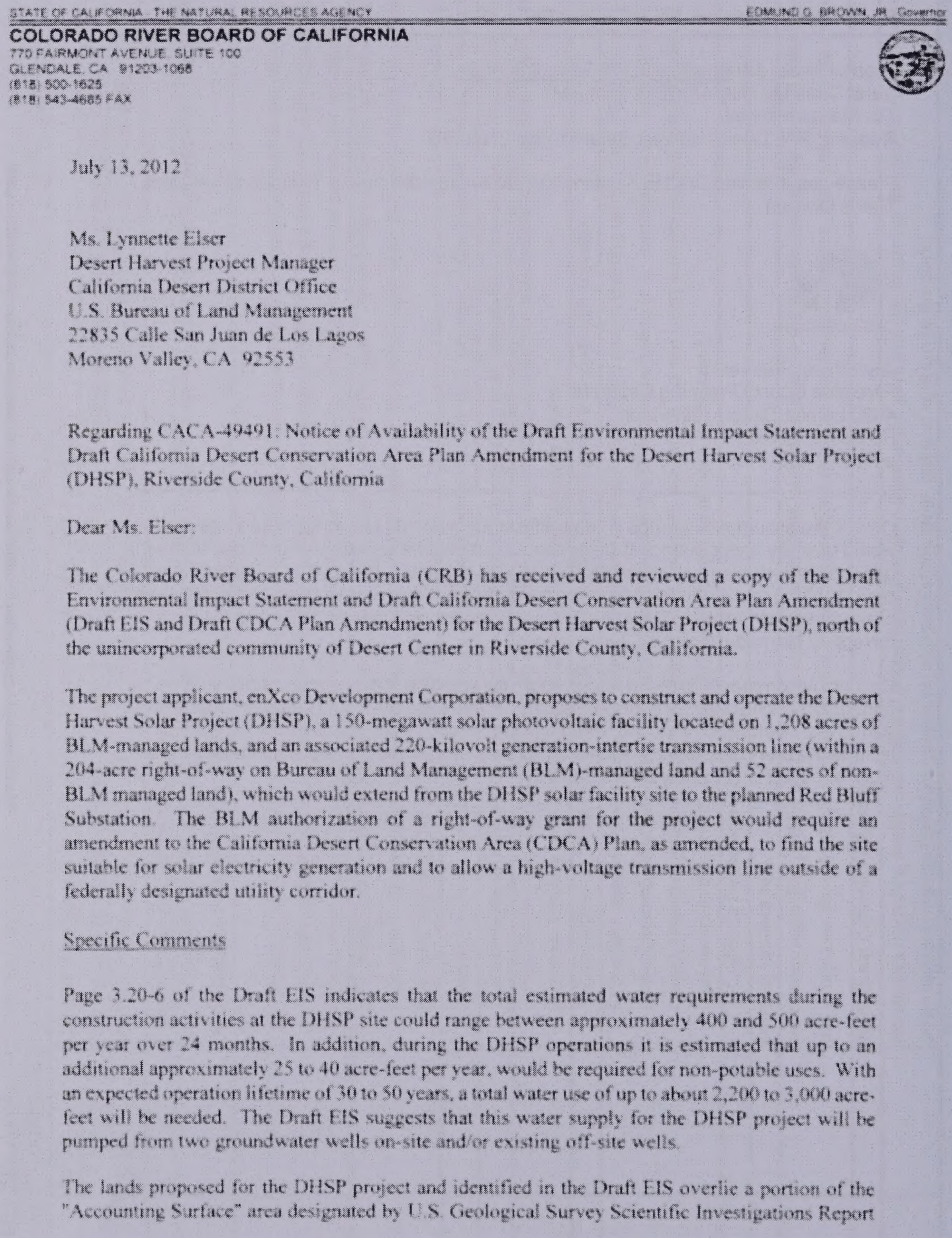
Please see attached Draft EIS comments below provided by our Transportation Dept. / Traffic Division. A005-1

Jay Olivas, Planner IV
Riverside County Planning Department
4080 Lemon Street, 12th Floor
Riverside, CA 92501
ph: (951) 955-1195

One of the assumptions made in the traffic study was that deliveries from large trucks would typically occur during off-peak hours. The only heavy vehicles included in the trip generation analysis were concrete truck mixers which would arrive and depart during all periods of the day. If this is to be true, the approval of the project permit should include provisions which require deliveries from large/heavy vehicles, except concrete truck mixers, to be made during off-peak periods.

One of my comments to the previous submittal was that traffic counts should not be conducted during atypical traffic conditions. In this case the counts were conducted during the week which included Thanksgiving holiday. Also, the traffic study did not include the raw count sheets. Without the raw counts sheets it is difficult to verify the numbers used in the analysis are correct.

COMMENT SET A006
COLORADO RIVER BOARD OF CALIFORNIA



STATE OF CALIFORNIA - THE NATURAL RESOURCES AGENCY EDMUND G. BROWN JR., Governor

COLORADO RIVER BOARD OF CALIFORNIA
770 FAIRMONT AVENUE, SUITE 100
GLENDALE, CA 91203-1068
(818) 500-1625
(818) 543-4685 FAX

July 13, 2012

Ms. Lynnette Elser
Desert Harvest Project Manager
California Desert District Office
U.S. Bureau of Land Management
22835 Calle San Juan de Los Lagos
Moreno Valley, CA 92553

A006-1

Regarding CACA-49491: Notice of Availability of the Draft Environmental Impact Statement and Draft California Desert Conservation Area Plan Amendment for the Desert Harvest Solar Project (DHSP), Riverside County, California

Dear Ms. Elser:

The Colorado River Board of California (CRB) has received and reviewed a copy of the Draft Environmental Impact Statement and Draft California Desert Conservation Area Plan Amendment (Draft EIS and Draft CDCA Plan Amendment) for the Desert Harvest Solar Project (DHSP), north of the unincorporated community of Desert Center in Riverside County, California.

The project applicant, enXco Development Corporation, proposes to construct and operate the Desert Harvest Solar Project (DHSP), a 150-megawatt solar photovoltaic facility located on 1,208 acres of BLM-managed lands, and an associated 220-kilovolt generation-intertie transmission line (within a 204-acre right-of-way on Bureau of Land Management (BLM)-managed land and 52 acres of non-BLM managed land), which would extend from the DHSP solar facility site to the planned Red Bluff Substation. The BLM authorization of a right-of-way grant for the project would require an amendment to the California Desert Conservation Area (CDCA) Plan, as amended, to find the site suitable for solar electricity generation and to allow a high-voltage transmission line outside of a federally designated utility corridor.

Specific Comments

Page 3.20-6 of the Draft EIS indicates that the total estimated water requirements during the construction activities at the DHSP site could range between approximately 400 and 500 acre-feet per year over 24 months. In addition, during the DHSP operations it is estimated that up to an additional approximately 25 to 40 acre-feet per year, would be required for non-potable uses. With an expected operation lifetime of 30 to 50 years, a total water use of up to about 2,200 to 3,000 acre-feet will be needed. The Draft EIS suggests that this water supply for the DHSP project will be pumped from two groundwater wells on-site and/or existing off-site wells.

The lands proposed for the DHSP project and identified in the Draft EIS overlie a portion of the "Accounting Surface" area designated by U.S. Geological Survey Scientific Investigations Report

COMMENT SET A006, CONT.
COLORADO RIVER BOARD OF CALIFORNIA

Ms. Lynnette Elser
July 13, 2012
Page 2

A006-1 cont.

2008-5113. That report indicates that the aquifer underlying such lands is considered to be hydraulically connected to the Colorado River and groundwater withdrawn from wells located on such lands would be replaced by Colorado River water, in part or in total. This means that if it is determined that these wells are, in fact, pumping groundwater which would be replaced by Colorado River water, the use of such water would need to be accounted for as a consumptive use of Colorado River water by the Secretary of the Interior.

According to the Consolidated Decree of the Supreme Court of the United States in the case of *Arizona v. California, et al.* entered March 27, 2006, (547 U.S. 150, 2006), the consumptive use of water means "diversion from the stream less such return flow thereto as is available for consumptive use in the United States or in satisfaction of the Mexican treaty obligation" and consumptive use "includes all consumptive uses of water of the mainstream, including water drawn from the mainstream by underground pumping." Also, pursuant to the 1928 Boulder Canyon Project Act (BCPA) and the Consolidated Decree, no water shall be delivered from storage or used by any water user without a valid contract between the Secretary of the Interior and the water user for such use, i.e., through a BCPA Section 5 contract.

A006-2

Prior to the issuance of the Decree in *Arizona v. California, et al.*, BCPA Section 5 contracts had been entered into between users of Colorado River mainstream water in California and the Secretary of the Interior for the use of water in amounts that exceed California's apportionment under a normal condition as set forth in the Consolidated Decree. Thus, no additional Colorado River water is available for use by new project proponents near the Colorado River under shortage, normal, or Intentionally Created Surplus conditions, except through an agreement with an existing BCPA Section 5 contract holder, through an exchange of non-Colorado River water for Colorado River water.

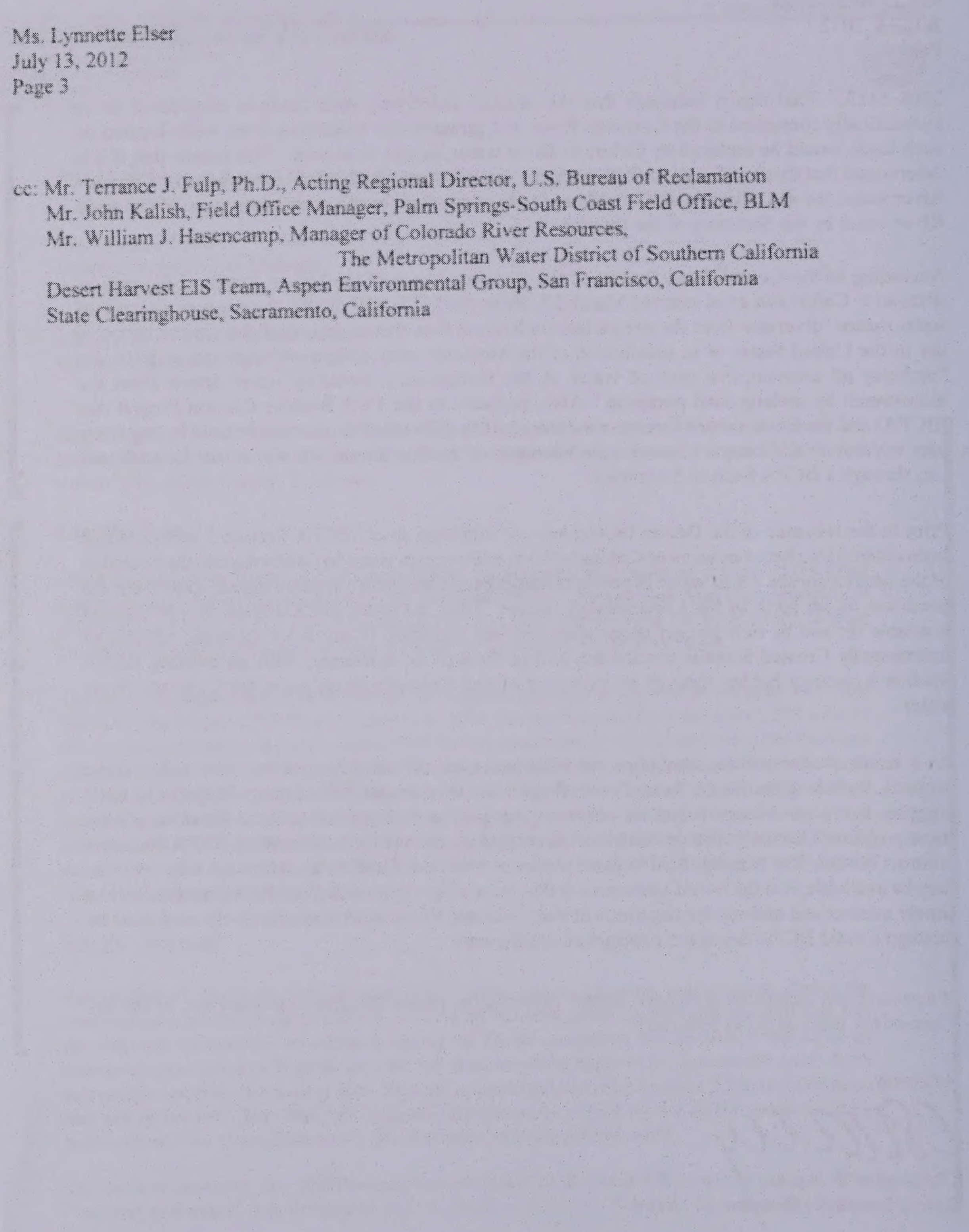
As a result of discussions associated with the provision of water for use by other solar power projects, including the Blythe Solar Power Project and the Genesis Solar Energy Project, the CRB suggests that a mechanism exists for obtaining a legally authorized and reliable water supply for these projects. Currently, that option involves obtaining water through an existing BCPA Section 5 contract holder, The Metropolitan Water District of Southern California. Although other options may be available, it is the Board's assessment that these other options may not be implementable in a timely manner and address the requirement that Colorado River water consumptively used must be through a valid BCPA Section 5 contractual entitlement.

If you have any questions or require further information, please feel free to contact me, or Dr. Jay Chen of my staff, at (818) 500-1625.

Sincerely,

Christopher S. Harris
Acting Executive Director

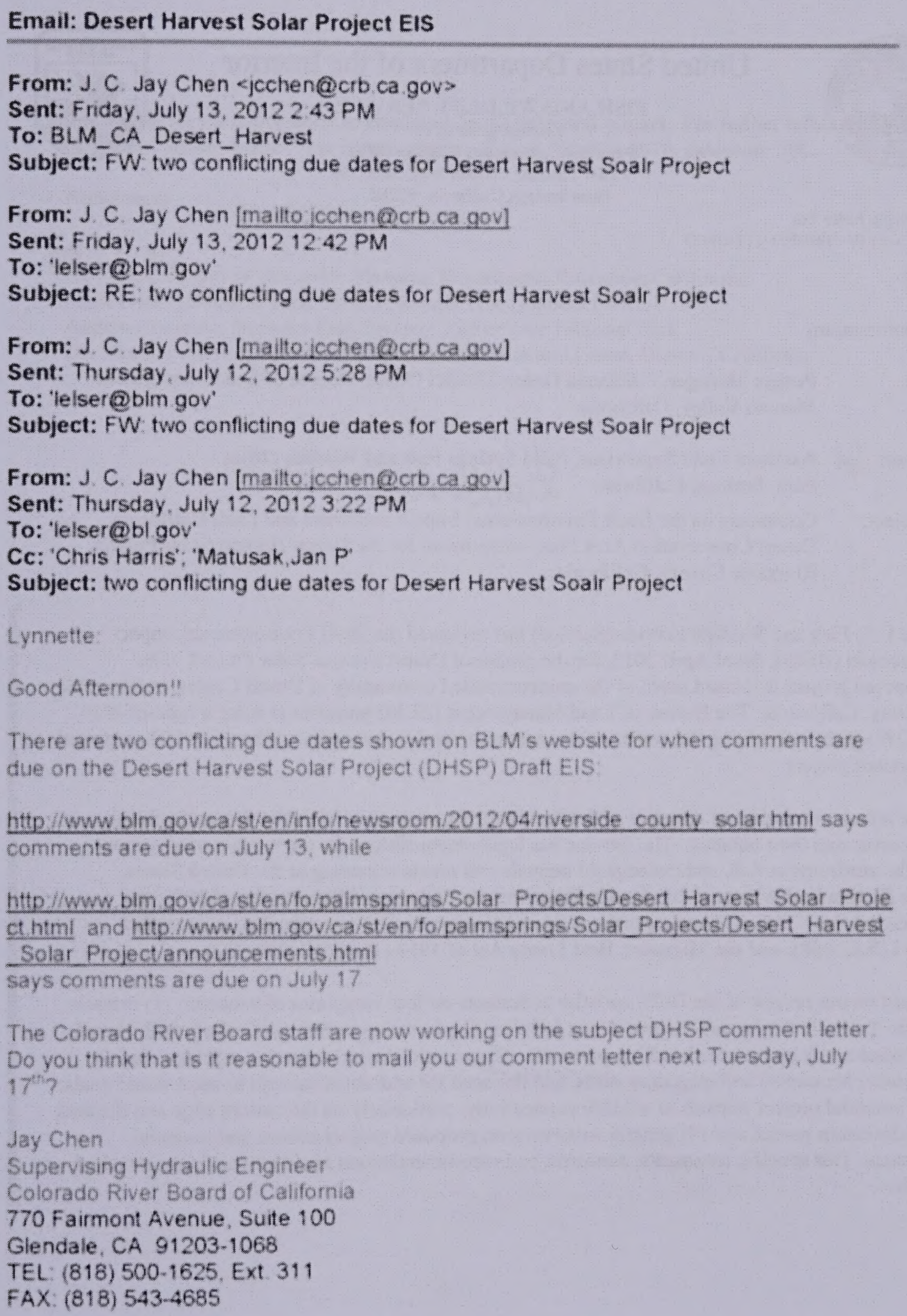
COMMENT SET A006, CONT.
COLORADO RIVER BOARD OF CALIFORNIA



Ms. Lynnette Elser
July 13, 2012
Page 3

cc: Mr. Terrance J. Fulp, Ph.D., Acting Regional Director, U.S. Bureau of Reclamation
Mr. John Kalish, Field Office Manager, Palm Springs-South Coast Field Office, BLM
Mr. William J. Hasencamp, Manager of Colorado River Resources,
The Metropolitan Water District of Southern California
Desert Harvest EIS Team, Aspen Environmental Group, San Francisco, California
State Clearinghouse, Sacramento, California

COMMENT SET A007
COLORADO RIVER BOARD OF CALIFORNIA



Email: Desert Harvest Solar Project EIS

From: J. C. Jay Chen <jcchen@crb.ca.gov>
Sent: Friday, July 13, 2012 2:43 PM
To: BLM_CA_Desert_Harvest
Subject: FW: two conflicting due dates for Desert Harvest Soalr Project

From: J. C. Jay Chen [mailto:jcchen@crb.ca.gov]
Sent: Friday, July 13, 2012 12:42 PM
To: 'lelser@blm.gov'
Subject: RE: two conflicting due dates for Desert Harvest Soalr Project

From: J. C. Jay Chen [mailto:jcchen@crb.ca.gov]
Sent: Thursday, July 12, 2012 5:28 PM
To: 'lelser@blm.gov'
Subject: FW: two conflicting due dates for Desert Harvest Soalr Project

From: J. C. Jay Chen [mailto:jcchen@crb.ca.gov]
Sent: Thursday, July 12, 2012 3:22 PM
To: 'lelser@bl.gov'
Cc: 'Chris Harris'; 'Matusak,Jan P'
Subject: two conflicting due dates for Desert Harvest Soalr Project

Lynnette:

Good Afternoon!!

There are two conflicting due dates shown on BLM's website for when comments are due on the Desert Harvest Solar Project (DHSP) Draft EIS:

http://www.blm.gov/ca/st/en/info/newsroom/2012/04/riverside_county_solar.html says comments are due on July 13, while

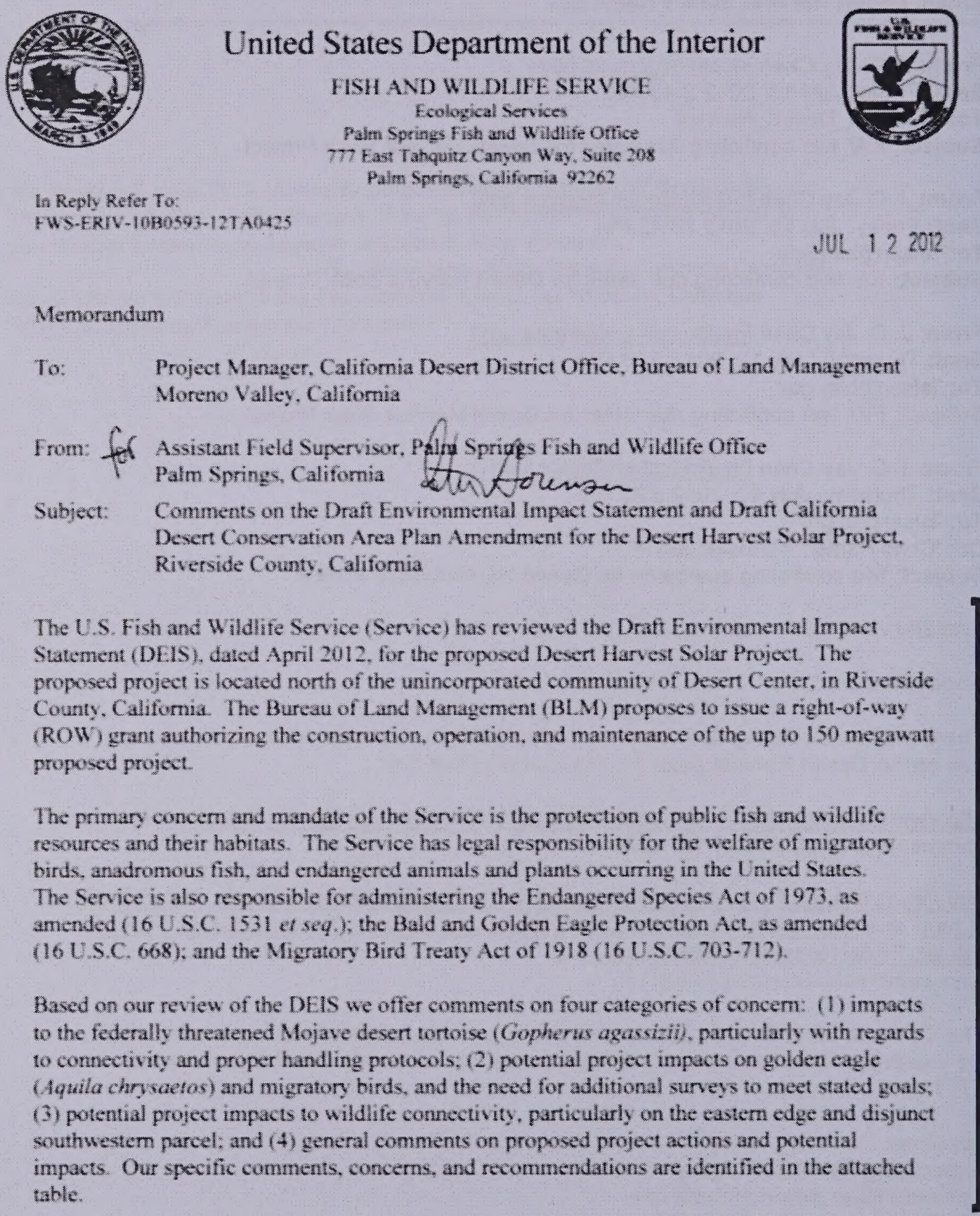
http://www.blm.gov/ca/st/en/fo/palmsprings/Solar_Projects/Desert_Harvest_Solar_Project.html and http://www.blm.gov/ca/st/en/fo/palmsprings/Solar_Projects/Desert_Harvest_Solar_Project/announcements.html
says comments are due on July 17

The Colorado River Board staff are now working on the subject DHSP comment letter. Do you think that is it reasonable to mail you our comment letter next Tuesday, July 17th?

A007-1

Jay Chen
Supervising Hydraulic Engineer
Colorado River Board of California
770 Fairmont Avenue, Suite 100
Glendale, CA 91203-1068
TEL: (818) 500-1625, Ext. 311
FAX: (818) 543-4685

COMMENT SET A008
U.S. FISH & WILDLIFE SERVICE



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
Palm Springs Fish and Wildlife Office
777 East Tahquitz Canyon Way, Suite 208
Palm Springs, California 92262

In Reply Refer To:
FWS-ERIV-10B0593-12TA0425

JUL 12 2012

Memorandum

To: Project Manager, California Desert District Office, Bureau of Land Management
Moreno Valley, California

From: for Assistant Field Supervisor, Palm Springs Fish and Wildlife Office
Palm Springs, California

Subject: Comments on the Draft Environmental Impact Statement and Draft California Desert Conservation Area Plan Amendment for the Desert Harvest Solar Project, Riverside County, California

A008-1

The U.S. Fish and Wildlife Service (Service) has reviewed the Draft Environmental Impact Statement (DEIS), dated April 2012, for the proposed Desert Harvest Solar Project. The proposed project is located north of the unincorporated community of Desert Center, in Riverside County, California. The Bureau of Land Management (BLM) proposes to issue a right-of-way (ROW) grant authorizing the construction, operation, and maintenance of the up to 150 megawatt proposed project.

The primary concern and mandate of the Service is the protection of public fish and wildlife resources and their habitats. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and endangered animals and plants occurring in the United States. The Service is also responsible for administering the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*); the Bald and Golden Eagle Protection Act, as amended (16 U.S.C. 668); and the Migratory Bird Treaty Act of 1918 (16 U.S.C. 703-712).

Based on our review of the DEIS we offer comments on four categories of concern: (1) impacts to the federally threatened Mojave desert tortoise (*Gopherus agassizii*), particularly with regards to connectivity and proper handling protocols; (2) potential project impacts on golden eagle (*Aquila chrysaetos*) and migratory birds, and the need for additional surveys to meet stated goals; (3) potential project impacts to wildlife connectivity, particularly on the eastern edge and disjunct southwestern parcel; and (4) general comments on proposed project actions and potential impacts. Our specific comments, concerns, and recommendations are identified in the attached table.

COMMENT SET A008, CONT.
U.S. FISH & WILDLIFE SERVICE

Thank you for the opportunity to comment on the proposed project. For further information or questions, please contact Nisa Marks of this office at 760-322-2070, extension 208.

A008-1 cont.

Attachment

cc:
Ken Baez, County of Riverside Planning Department, Riverside, California
Mark Butler, National Park Service, Joshua Tree National Park
Andrea Compton, National Park Service, Joshua Tree National Park
Dr. Shankar Sharma, California Department of Fish and Game, Ontario, California

Attachment

Standard Review Form
Draft EIS, Desert Harvest Solar Project

Reviewer's Name: Nisa Marks
Reviewer's Organization: U.S. Fish and Wildlife Service, Region 8
Reviewer's email address: nisa_marks@fws.gov
Reviewer's Telephone numbers: 760-322-2070
Primary Disciplinary Area (e.g., ecology, land use planning, regulatory oversight): Biology, endangered species, regulatory oversight (Endangered Species Act, Bald and Golden Eagle Act, Migratory Bird Treaty Act)
Section or Chapter Number and Date of Reviewed Document: April 2012 Public Draft

Section	Page	Comments	
2.5.4	2-8	If possible, please bury the high-capacity 34.5 kV collection system transmission lines between the switchgear and substation. Burying the transmission line would minimize potential avian impacts without leading to additional ground disturbance, given the location of these lines.	A008-1 co
2.5.4	2-8	Please identify which option will be used to electrically connect the disjunct southwestern parcel with the onsite substation, under Alternatives 4 and 5.	A008-2
2.5.4	2-8	Please clarify if the meteorological station would be free-standing or require the use of guy wires. If the latter, please ensure that all guy wires installed are outfitted with bird deterrence devices in accordance with the Avian Power Line Interaction Committee guidelines.	A008-3
2.5.4	2-9	The security fence should be installed contiguous to the permanent desert tortoise exclusion fence, to minimize the probability of animals jumping the desert tortoise exclusion fence and burrowing under the security fence, thereby entering the project site.	A008-4
2.5.4	2-11	If the Operations & Maintenance (O&M) facility is off-site, please use a monopole structure to support necessary telecommunication equipment, to deter bird nesting and use by ravens as a perch, roost, or nesting substrate.	A008-5
2.17.1	2-68	The western Chuckwalla Valley, including the proposed ROW, is a critical linkage area between populations in the Mojave and Colorado/Sonoran deserts for numerous species. For desert tortoise, this is one of the few areas between northern and southern populations where topographic and climatic features minimally constrain desert tortoise habitat suitability. Two separate connectivity studies, one conducted by the BLM and one by the California Department of Fish and Game (CDFG), support the conclusion that the vicinity of the proposed project, particularly the area west of Kaiser Road, is important for tortoise connectivity. The BLM study also identifies Cottonwood Pass as providing connectivity between the Chuckwalla Valley and the Pinto Basin. However, this area is bisected by the road entrance to Joshua Tree National Park, which can receive heavy traffic during tortoise	A008-6

COMMENT SET A008, CONT.
U.S. FISH & WILDLIFE SERVICE

Section	Page	Comments Continued	
		active seasons. Further, because of the road, the resource value of this area as tortoise habitat is compromised. Other areas around the road entrance are too rugged to provide connectivity. Thus, contrary to what the BLM study concludes, the area around the proposed project is the best remaining area of population connectivity. Desert tortoise populations demonstrate an isolation-by-distance pattern. Consequently, connectivity of tortoise populations depends on maintaining overlapping home ranges. The DEIS acknowledges that the project site and land to its east contains suitable habitat. Although the eastern band of suitable habitat is constrained by agricultural development and a gradation into drier, sandier habitat, the eastern edge of the proposed project and the wash to its east have suitable substrates for burrowing, as evidenced by the abundance of coyote, kit fox, ground squirrel, and kangaroo rat burrows. Aligning the eastern boundary of the proposed project with that of Desert Sunlight Solar Farm would limit the remaining native habitat corridor to approximately 0.5 miles (mi), approximately half the size of the 1.0 mi corridor remaining northwest of Desert Sunlight, as analyzed in the biological opinion for that project. Although far from ideal, a corridor this size would be of greater value to a number of species, including desert tortoise, than the 0.2 mi-wide corridor that would result from implementation of the proposed action. Given the cumulative impacts to this critical area for regional connectivity that would result from Desert Sunlight, the proposed Eagle Mountain Pumped Storage Hydroelectric Project, and implementation of the proposed action, as well as the necessity of maintaining redundancy in connectivity corridors, we disagree with the BLM's conclusions that this area is of limited connectivity value. We maintain that the Service-proposed alternative to eliminate the portion of the proposed project east of the Desert Sunlight boundary would materially decrease project impacts to connectivity for desert tortoise and wildlife in general, and recommend its continued consideration.	A008-6 cont.
3.3.1	3.3-1	An incomplete definition of take is provided in the discussion of section 9 of the Endangered Species Act. Please provide the complete definition of "take" from Section 3 of the Endangered Species Act: "to harass, harm, pursue, hunt, shoot, wound, trap, kill, capture, or collect, or attempt to engage in any such conduct."	A008-7
3.4.5	3.4-18	Please elaborate on the description of desert tortoise occurrences in the vicinity of the proposed project. In particular, the area between Kaiser Road and Eagle Mountain Road supports some of the highest densities of desert	A008-8

COMMENT SET A008, CONT.
U.S. FISH & WILDLIFE SERVICE

Section	Page	Comments Continued	
		tortoises of anywhere in the species' range. Please summarize these occurrences and their proximity to the proposed project site and transmission line.	A008-8 c
3.4.5	3.4-22	Please clarify the description of seasonal use by golden eagles of on-site foraging habitat. It is unclear what birds are being referred to at any point in time in the last paragraph about golden eagles (i.e., floaters, juveniles, subadults, resident adults). In addition, the description provided does not convey a site-specific understanding of golden eagle use of the project area and surrounding habitat throughout the year.	A008-9
3.4.5	3.4-22	Please provide citations or a description of survey results to support the expectation that golden eagle foraging is likely to be more common during the winter and migration seasons. To our knowledge, site-specific or regional (i.e., desert-based) data to support this conclusion are lacking.	A008-10
3.4.5	3.4-23	Please identify what time of year the unpublished observations of Gila woodpecker were, to inform a deduction of if these birds were using the area for breeding, migration, or wintering habitat.	A008-11
3.11.3	3.11-7	Please include in table 3.11-2 a description of the proposed water and transmission line ROWs and the Federal Energy Regulatory Commission withdrawal associated with the proposed Eagle Mountain Hydroelectric Pumped Storage Project. In addition to considering effects of existing uses, easements, and ROWs on the gen-tie alternative routes, please discuss any implications for the southwestern parcel of the proposed project, as well as for any transmission that would be necessary under Alternatives 4 and 5 to connect the two disjunct parcels of the proposed solar project.	A008-12
4.2.6	4.2-8	To minimize fugitive dust, please consider phased grading, in which only the portions of the site slated for immediate construction are graded at a time instead of grading the entirety of the project site at once.	A008-13
4.3.7	4.3-13	Mitigation Measure Veg-1 identifies the Designated Biologist as responsible for monthly compliance inspections throughout the construction and decommissioning phases of the project. However, the Designated Biologist is also responsible for weekly verbal or written updates to relevant agencies. Please clarify when the Designated Biologist is required to be on site, including a discussion of how weekly updates would be prepared without a corresponding on-site inspection. We suggest that the utility of reports without onsite presence and inspection of equal or greater frequency would be limited.	A008-14
4.3.7	4.3-14	The Designated Biologist should ensure that *all* employees, contractors, and onsite personnel receive WEAP training, not just the Biological Monitors.	A008-15
4.3.7	4.3-15	Please revise measure Veg-2 to reflect that, given the size of the proposed project footprint, it likely will not be possible to relocate all animals to outside the project site and still within 500 meters of the animals' original	A008-16

COMMENT SET A008, CONT.
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Section	Page	Comments Continued	
		location. Any relocation or translocation of desert tortoises should be conducted according to the Service's most recent guidance.	A008-16 cont.
4.3.7	4.3-15	Any person who handles desert tortoises must have prior approval as an Authorized Biologist by the Service. This includes the Designated Biologist and any Biological Monitor who would handle tortoise.	A008-17
4.3.7	4.3-18	Please revise Mitigation Measure Veg-5, bullet 4, to reflect that Monitoring of the reclamation, revegetation, or restoration sites should continue for 3 years or until the defined success criteria are achieved, *whichever is later*.	A008-18
4.3.7	4.3-21	Please clarify the bullet describing habitat compensation to be provided for burrowing owls. Given that no burrowing owls were found during protocol surveys, does the number of individuals for which compensation is provided reflect incidental observations, or any owls potentially encountered during clearance surveys? If the latter, please recognize that if owls are encountered during clearance, a burrowing owl plan would need to be prepared and their eviction conducted in accordance with measures described by CDFG.	A008-19
4.3.7	4.3-21	The bullet identifying compensation ratios describes providing a minimum of 1:1 compensation for occupied or suitable desert tortoise habitat, whereas the text that follows those bullets describes a minimum acreage of occupied habitat. Please reconcile these two, and clarify if suitable but unoccupied desert tortoise habitat would be considered for compensation.	A008-20
4.3.7	4.3-21	Final project compensation requirements should reflect final design *and* (not or) the final alternative selected. Please edit this language in the text above Table 4.3-3 to reflect this.	A008-21
4.3.7	4.3-24	BLM should clarify if it intends to use the Renewable Energy Action Team process for reviewing and approving project mitigation. For bullets 4 and 5 of Mitigation Measure Veg-6, compensation lands should be approved by CDFG and the Service; not just by the BLM and Riverside County in consultation with CDFG and the Service.	A008-22
4.3.7	4.3-26	For sub-bullet (d) of bullet 6 of Mitigation Measure Veg-6, the Property Analysis Record for compensation lands should be approved by CDFG and the Service; not just by the BLM and Riverside County in consultation with CDFG and the Service.	A008-23
4.3.16	4.3-56	Sufficient information is lacking to consider what is "reasonably foreseeable" over the more than 30 years spanned by the proposed operations and decommissioning phases. During that time period, it would be reasonable to expect that additional land use applications will be filed, not all existing applications will be permitted and built, different land uses may become of higher priority or consideration than current scenarios allow. Please reconcile the time period over which project impacts are expected to occur (i.e., 30 or more years) with the use of all existing applications to the BLM or	A008-24

COMMENT SET A008, CONT.
U.S. FISH & WILDLIFE SERVICE

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Section	Page	Comments Continued	
		California Energy Commission as the basis for analysis of cumulative effects. Please also include discussion of areas where development may be precluded.	A008-24 c
4.3.16	4.3-57	Please include the Eagle Mountain Pumped Storage Hydroelectric project in table 4.3-5.	A008-25
4.3.16	4.3-60	Please include the Eagle Mountain Pumped Storage Hydroelectric project in discussion of cumulative effects.	A008-26
4.4.7	4.4-17	Please clarify what is meant by the sentence that the project description does not propose to specify or designate wildlife corridors.	A008-27
4.4.7	4.4-18	Please see the comment on 2-68. In addition, the DEIS does not address potential impacts to desert tortoise connectivity from an increased volume of traffic using Kaiser Road, particularly during construction of the proposed project. Kaiser Road serves as the sole access point to the proposed project. Given the critical connectivity importance of the area in the immediate vicinity of Kaiser Road, as well as cumulative impacts from Desert Sunlight, and the proposed Eagle Mountain Pumped Storage Hydroelectric Project, any increase in road-induced mortality over baseline levels is of concern. Increased mortality in this narrow linkage would be expected to further decrease tortoise population abundances and densities, thereby reducing the capacity of this linkage to function in demographic and genetic dispersal. With this consideration in mind, we respectfully disagree with the conclusion at 4.4-18 that the proposed project would not substantially affect desert tortoise connectivity. In addition, it underscores the importance of having a complete project description. To adequately analyze impacts to connectivity, it is necessary to consider whether an on- or off-site O&M facility will be constructed, and, if off-site how much traffic to and from the site would result, as well as a refinement of how many construction and water vehicles would be using Kaiser Road to access the proposed site. We recommend development of an on-site O&M facility, to reduce project-related traffic on Kaiser Road.	A008-28
4.4.7	4.4-19	The wildlife displacement described in 4.4.7, when combined with increased traffic from project activities, would lead to increased incidences of roadkill. Please include mortality from road traffic in the discussion of project impacts.	A008-29
4.4.7	4.4-24	Construction activities outside of desert tortoise exclusion fencing, including access roads, pulling and tensioning sites, and storage and parking areas, should be contained to disturbance areas flagged in accordance with Mitigation Measure Wild-1.1.	A008-30
4.4.7	4.4-25	Please explain why the provision to allow vehicle parking and storage outside of the area enclosed by desert tortoise fencing would be necessary.	A008-31

COMMENT SET A008, CONT.
U.S. FISH & WILDLIFE SERVICE

Section	Page	Comments Continued	
4.4.7	4.4-25	Please clarify what facilities and work areas are proposed outside of desert tortoise exclusion fencing. In Wil-1, bullet 10, please clarify if the access roads outside of desert tortoise exclusion fencing are associated with proposed linear components or another part of the proposed action.	A008-32
4.4.7	4.4-26	Reduction in the amount of water applied for fugitive dust control is not the only measure appropriate for avoiding standing water. This and other measures to minimize standing water should be implemented as determined by or in coordination with the BLM, not at the sole discretion of the Biological Monitor.	A008-33
4.4.7	4.4-26	In the event that injured wildlife is found during project activities, CDFG should be notified immediately.	A008-34
4.4.7	4.4-27	Please clarify in the project description section (chapter 2) what activities would occur outside of the fenced area (as referenced in Wil-1.18), and where such activities would occur.	A008-35
4.4.7	4.4-28	Mitigation measures pertaining to the evaporation and construction water storage ponds should be addressed in specific detail in the Bird and Bat Conservation Strategy (BBCS).	A008-36
4.4.7	4.4-28	Netting used to cover the evaporation ponds should be 2 centimeters square or smaller, to prevent bird entanglement, not 1.5 inches square. In addition, netting should be installed in such a way as to prevent sagging, and should be a minimum of 5 feet above the water surface.	A008-37
4.4.7	4.4-28	Please clarify what types of visual deterrents would be installed to prevent avian use of evaporation ponds. In addition, please specify what the goal of such deterrents would be, and how its use supplements exclusionary netting.	A008-38
4.4.7	4.4-28	Comparable measures to what are described to cover O&M evaporation ponds should be implemented over construction water ponds to minimize water availability to ravens and avoid impacts to migratory birds and other wildlife.	A008-39
4.4.7	4.4-28	In addition to implementing the terms and conditions of the biological opinion for the project, the applicant will be responsible for implementing any measures included as part of CDFG's incidental take permit.	A008-40
4.4.7	4.4-29	Please clarify under what conditions the applicant would place desert tortoises in care or holding facilities, instead of translocating tortoises to a recipient site. This is typically only done when individuals found on the project site are carriers of diseases.	A008-41
4.4.7	4.4-30	In addition to inspecting for tortoises that are trapped inside the fence, the fenced perimeter should be inspected for tortoises that are pacing the outside boundary of the fence.	A008-42
4.4.7	4.4-30	Project construction activities outside of tortoise exclusion fencing should only occur when a Biological Monitor is on site.	A008-43

COMMENT SET A008, CONT.
U.S. FISH & WILDLIFE SERVICE

Section	Page	Comments Continued	
4.4.7	4.4-31	Please provide a rationale for conducting a preconstruction survey for nesting birds approximately 20 days before the start of construction, as described for the first of the two construction surveys. Performing two surveys likely would increase the percentages of nests detected. However, because nests can be built in 2 to 3 days, data collected in surveys 20 days before construction would be of minimal to no utility. If two surveys are conducted,	A008-44
		it would provide more reliable information about the presence of nests on site if the first survey is conducted within 10 days of the start of construction. Regardless of the number of surveys conducted, the last preconstruction clearance survey for nesting birds should be conducted a maximum of 2 to 3 days prior to the start of construction activity. If only one survey is performed, it should be conducted 2 to 3 days before the start of construction. This period reflects the amount of time necessary to build a nest; surveys conducted further in advance of construction thus are less likely to detect all nests on site and allow for the establishment of appropriate buffers.	
4.4-7	4.4-32	The nest monitoring plan should be included as part of the project's BBCS, rather than prepared as a separate plan.	A008-45
4.4.7	4.4-32	The report documenting pre-construction nest surveys, described in bullet 5, should also include documentation of delineation of avoidance zones, including location information, photographs, and descriptions of the method used to delineate the avoidance zones.	A008-46
4.4.7	4.4-32	Please note that removal or relocation of any active nest, as described in bullet 7, would require a permit, subject to the Migratory Bird Treaty Act. Please also note that removal or relocation of any eagle nest, whether active or not, requires a permit.	A008-47
4.4.7	4.4-35	Please provide the Service with the data from winter 2011-2012 golden eagle surveys.	A008-48
4.4.7	4.4-35	Nesting season surveys for golden eagle should determine nesting productivity and chronology, in addition to occupancy. Please add this to the sentence in bullet 1, such that it would read: "Nesting season surveys will determine occupancy, *productivity, and chronology* of known or newly discovered nesting territories within the 10-mile radius."	A008-49
4.4.7	4.4-35	Determining winter season habitat use by golden eagles, as described in the last sentence of bullet 1, would require much more rigorous survey techniques than have been used to date by the project applicant. For specific survey recommendations, please refer to the March 2, 2012, meeting between the Service, BLM, CDFG, NPS, and applicant and their consultants.	A008-50

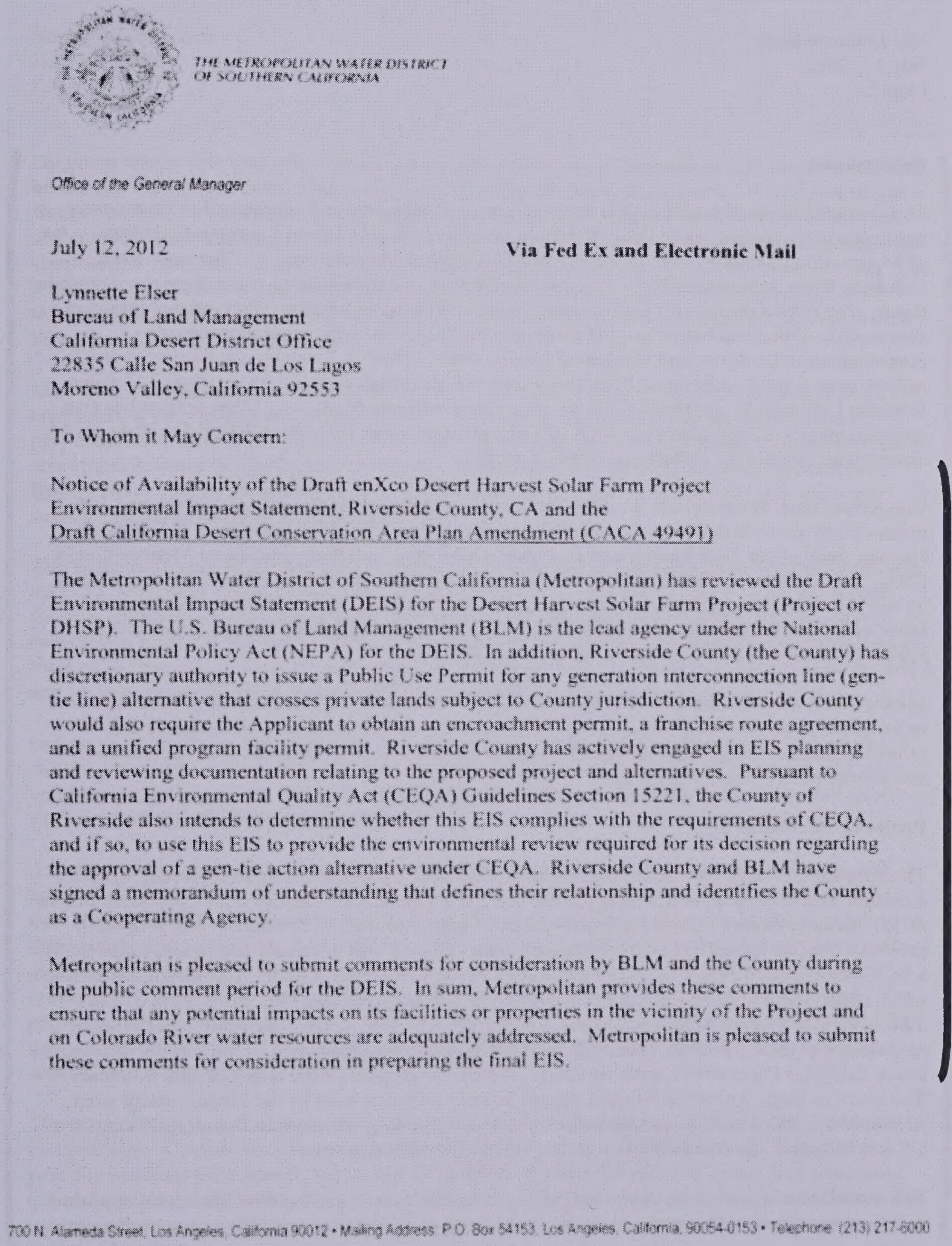
COMMENT SET A008, CONT.
U.S. FISH & WILDLIFE SERVICE

Section	Page	Comments Continued	
4.4.7	4.4-35	To accurately understand eagle use of the project area, and therefore characterize mortality risk, the applicant should gather eagle occurrence data from throughout the year, not just during winter. For example, migrating eagles may use the site as foraging habitat during the winter, spring, or fall, and floater eagles may be present at any time of year.	A008-51
4.4.7	4.4-35	Please add the number of observation minutes spent surveying for eagles to the list of what data, at a minimum, will be collected during winter season surveys. Please also add nest status (i.e., active or inactive) to this list. The sentence would thus read: "Data collected during the nesting season surveys shall include at least the following: territory status (unknown, vacant, occupied, breeding successful, and breeding unsuccessful); *nest status (active or inactive) for each nest*; nest location; nest elevation; age class of golden eagles observed; nesting chronology; number of young at each visit; *number of observation minutes spent looking for eagles;* photographs; and substrate upon which nest is placed."	A008-52
4.4.7	4.4-35	The Monitoring and Adaptive Management Plan should be approved by BLM, in consultation with the Service, not vice versa.	A008-53
4.4.7	4.4-35	The Monitoring and Adaptive Management Plan should be developed prior to the start of construction activities. The timeline as proposed does not allow for implementation of a plan in time to avoid injury or disturbance to golden eagles. The time required to find and fund a contractor to develop a plan that meets Agency standards likely would extend long enough past when the eagle(s) were first detected that it would be beyond the nesting season or have missed a substantial percentage of the construction period. Because we know that the surrounding area is suitable habitat and occupied by eagles, and eagle territories do not change substantially from year to year, this plan should be developed and in place prior to the start of construction activities.	A008-54
4.4.7	4.4-36	Survey protocols implemented by the project should be tailored to meet the goals of how the applicant and Agencies hope to use the data. Surveys that have been conducted to date are not adequate to meet the goals of bullets 2 or 5 of Mitigation Measure Wil-6. In particular, eagle surveys have not been conducted during migration seasons, and on-site unlimited distance long sit point counts have not been conducted to observe where eagles forage in the area. In addition, the bird point counts conducted do not provide enough information about birds that may be migrating through the area or using the microphyll woodland on site.	A008-55
4.4.7	4.4-36	The BBCS should also include the raw data sheets from bird surveys.	A008-56
4.4.7	4.4-36	No take is permitted under the Migratory Bird Treaty Act. However, we provide recommendations and feedback on any measures proposed by the applicant to avoid and minimize impacts to avifauna, and take into account	A008-57

COMMENT SET A008, CONT.
U.S. FISH & WILDLIFE SERVICE

Section	Page	Comments Continued	
		the documented efforts of an applicant to adopt such measures when deciding whether or not to prosecute any take that may occur.	A008-57 c
4.4.7	4.4-38	Baseline surveys for raven abundance should be conducted immediately to adequately ascertain pre-project numbers for future comparisons.	A008-58
4.4.7	4.4-38	Please add nest sites to the sentence that begins "regardless of raven monitoring results…" in the introductory paragraph of Mitigation Measure Wil-8. The sentence should read, "…including avoidance and minimization of project-related trash, water sources, or perch/roost/*nest* sites that could contribute…"	A008-59
4.4.16	4.4-55	Please see comments for 4.3-56 and 4.3-57 and apply to Table 4.4-3.	A008-60

COMMENT SET A009
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Office of the General Manager

July 12, 2012 **Via Fed Ex and Electronic Mail**

Lynnette Elser
Bureau of Land Management
California Desert District Office
22835 Calle San Juan de Los Lagos
Moreno Valley, California 92553

To Whom it May Concern:

A009-1

Notice of Availability of the Draft enXco Desert Harvest Solar Farm Project Environmental Impact Statement, Riverside County, CA and the Draft California Desert Conservation Area Plan Amendment (CACA 49491)

The Metropolitan Water District of Southern California (Metropolitan) has reviewed the Draft Environmental Impact Statement (DEIS) for the Desert Harvest Solar Farm Project (Project or DHSP). The U.S. Bureau of Land Management (BLM) is the lead agency under the National Environmental Policy Act (NEPA) for the DEIS. In addition, Riverside County (the County) has discretionary authority to issue a Public Use Permit for any generation interconnection line (gen-tie line) alternative that crosses private lands subject to County jurisdiction. Riverside County would also require the Applicant to obtain an encroachment permit, a franchise route agreement, and a unified program facility permit. Riverside County has actively engaged in EIS planning and reviewing documentation relating to the proposed project and alternatives. Pursuant to California Environmental Quality Act (CEQA) Guidelines Section 15221, the County of Riverside also intends to determine whether this EIS complies with the requirements of CEQA, and if so, to use this EIS to provide the environmental review required for its decision regarding the approval of a gen-tie action alternative under CEQA. Riverside County and BLM have signed a memorandum of understanding that defines their relationship and identifies the County as a Cooperating Agency.

Metropolitan is pleased to submit comments for consideration by BLM and the County during the public comment period for the DEIS. In sum, Metropolitan provides these comments to ensure that any potential impacts on its facilities or properties in the vicinity of the Project and on Colorado River water resources are adequately addressed. Metropolitan is pleased to submit these comments for consideration in preparing the final EIS.

700 N. Alameda Street, Los Angeles, California 90012 • Mailing Address: P.O. Box 54153, Los Angeles, California, 90054-0153 • Telephone (213) 217-6000

COMMENT SET A009, CONT.
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Ms. Lynnette Elser
July 12, 2012
Page 2

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Background

Metropolitan is a public agency and regional water wholesaler. It is comprised of 26 member public agencies serving more than 19 million people in six counties in Southern California. One of Metropolitan's major water supplies is the Colorado River conveyed via Metropolitan's Colorado River Aqueduct (CRA). Metropolitan holds an entitlement to water from the Colorado River. The CRA consists of tunnels, open canals and buried pipelines. CRA-related facilities also include above and below ground reservoirs and aquifers, access and patrol roads, communication facilities, and residential housing sites. The CRA, which can deliver over 1.2 million acre-feet of water annually to the southern California coastal plain, extends 242 miles from the Colorado River, through the Mojave Desert to Lake Mathews. Metropolitan has five pumping plants located along the CRA, which consume approximately 2,400 gigawatt-hours of energy when the CRA is operating at full capacity.

Concurrent with its construction of the CRA in the mid-1930s, Metropolitan constructed 305 miles of 230 kilovolt (kV) transmission lines that run from the Mead Substation in Southern Nevada, head south, then branch east to Parker, California, and then west along Metropolitan's CRA. Metropolitan's CRA transmission line easements lie on federally-owned land, managed by the U.S. Department of the Interior, Bureau of Land Management (BLM). The transmission lines were built for the sole and exclusive purpose of supplying power from the Hoover and Parker projects to the five pumping plants along the CRA.

Metropolitan's ownership and operation of the CRA and its 230 kV transmission system is vital to its mission to provide Metropolitan's 5,200 square mile service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

Project Understanding

The applicant, enXco, has requested a right-of-way (ROW) authorization to construct, operate, maintain, and decommission a solar photovoltaic (PV) generating facility with a proposed output of 150 megawatts (mw) and a facility footprint of approximately 1,280 acres. The proposed project would be located on a largely vacant, undeveloped, and relatively flat land area on BLM-administered lands in the Chuckwalla Valley in eastern Riverside County, California, about five miles north of the rural community of Desert Center, California and four miles north of Lake Tamarisk. The Project Area contains existing transmission lines, telephone lines, and pipelines, as well as dirt roads. Joshua Tree National Park is north, east, and west of the area; at its closest point, the Solar Farm site is approximately 1.4 miles southwest of the national park boundary. The inactive Eagle Mountain Mine is approximately one mile west of the Project Study Area. Metropolitan's Colorado River Aqueduct (CRA) and the Eagle Mountain Pumping Plant of the CRA are located approximately two miles west of the solar farm site.

The overall site layout and generalized land uses could include a substation, an administration building, operations and maintenance facilities, a transmission line, and temporary construction

COMMENT SET A009, CONT.
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

A009-1 cont.

lay down areas. The project's 220 kV generation interconnection transmission line would either be located on the previously approved First Solar Desert Sunlight project's 230-kV gen-tie (as a shared facility), or would be located on a combination of private and BLM-administered lands and would utilize a planned 230- to 500-kV substation (referred to as the Red Bluff Substation). Gen-tie line Alternatives B, C, D, and E would cross parcels owned in fee by Metropolitan. The Red Bluff Substation would connect the project to Southern California Edison's regional transmission grid. If the project is approved, construction would begin in late 2013 and would take 9 to 12 months to complete.

In sum, the Project proposes to use up to 500.51 acre-feet of water per year during construction, estimated to take two years, and up to 39.02 acre-feet per year for long-term operations. The proposed solar facility proposes to draw water from two new and/or existing local wells to meet construction water demands, one of which would continue to be used for project operations. Both wells would be available for use during construction to provide flexibility in the water supply and in the event of a well malfunction.

The potential locations for the construction of two new on-site wells are at the northeastern and northwestern areas of the project site. As an alternative to new wells, DHSP may use nearby (within 10 miles) off-site active wells that have a reported individual (per well) production capacity of between 800 and 2,200 acre-feet per year. If off-site wells are used, water would be trucked to the on-site water treatment facility described below. No new roads would be required and no new ground disturbance would occur as a result of using off-site wells.

enXco would perform the necessary studies and secure the necessary permit(s) to install the well(s). In addition, sampling and analysis in accordance with established protocols and with appropriate analytical test methods would be performed to assess water sufficiency and quality at each active well of appropriate capacity.

As noted above, during the 24-month construction period, an estimated total of between 400.51 and 500.51 acre-feet of water would be needed as indicated on page 3.20-6 of the DEIS for such uses as soil compaction, dust control, and sanitary needs for construction workers, depending on the configuration selected. The majority of the construction water use would occur during site grading operations. The daily water demand during construction of the project is estimated to range from a low of 125,000 gallons per day (gpd) to a peak of an estimated 600,000 gpd. The project's maximum well extraction rate over any 24-hour period is not expected to exceed 880 gallons per minute (gpm). Drinking water would be provided from an off-site commercial source during construction.

The project's total operational water requirement would be approximately 26.02 to 39.02 acre-feet per year. Operation of the project would require a water supply of 18 to 27 acre-feet per year for washing solar panels, assuming 1.1 gallons of water for each PV panel and a washing schedule of two to three times per year. As with construction of the project, it is anticipated that operational water would be pumped from the underlying basin using on-site supply wells, or it

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METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

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would be pumped from off-site wells within the basin and trucked to the project site. (DEIS at 4.20-14 & -15)

Land Use Issues: Potential Impacts on Metropolitan Facilities

Although Metropolitan has not yet identified any direct impacts from the solar facility which is adjacent to Metropolitan rights-of-way, there are land use impacts from Alternatives B, D and E where the gen-tie line crosses land owned by Metropolitan. As described above, Metropolitan currently has a significant number of facilities, real estate interests, and fee-owned rights-of-way, easements, and other properties (Facilities) located on or near BLM-managed land in southern California that are part of our supplemental water conveyance system. A map of the Project in relation to Metropolitan's Facilities is enclosed for reference. Metropolitan is concerned with potential direct or indirect impacts that may result from the construction and operation of any proposed solar energy project on or near our Facilities. In order to avoid potential impacts, Metropolitan requests that the final EIS include an assessment of potential impacts to Metropolitan's Facilities or properties with proposed measures to avoid or mitigate significant adverse effects consistent with the land use mitigation measures set forth in the DEIS (see 4.11-5 – 4.11-12 & MMLR – 1 Prior ROW Coordination).

Metropolitan is also concerned that locating solar projects near or across its electrical transmission system could have an adverse impact on Metropolitan's electric transmission-related operations and Facilities. Metropolitan's Eagle Mountain Pumping Plant is one of five pumping plants along the CRA that receives power from Metropolitan's 230-kV transmission system. This power is needed to energize the pumps that supply water to Metropolitan's service area. Metropolitan is concerned the proposed Project may adversely impact its ability to deliver water if the proposed Project causes a disruption to Metropolitan's electric system. Construction activities and operation of any new facilities resulting from the proposed Project should not impede or increase the cost of any electrical operation or maintenance activities on the CRA and its related transmission system. From a reliability and safety aspect, Metropolitan is concerned with development of any proposed projects and supporting transmission systems that would cross or come in close proximity with Metropolitan's transmission system. Metropolitan requests that the final EIS include an assessment of potential impacts to Metropolitan's transmission system with proposed measures to avoid or mitigate significant adverse effects.

Water Resources: Potential Impacts on Local Water Supplies

A009-2

Metropolitan is also concerned about the Project's potential direct and cumulative impacts on water supplies, specifically potential impacts on Colorado River and local groundwater supplies. As noted above, Metropolitan holds an entitlement to imported water supplies from the Colorado River. Water from the Colorado River is allocated pursuant to federal law and is managed by the Department of the Interior, Bureau of Reclamation (USBR). In order to lawfully use Colorado River water, a party must have an entitlement to do so. See Boulder Canyon Project Act of 1928, 43 U.S.C. §§ 1501, et seq.; *Arizona v. California* (Consolidated Decree), 547 U.S. 150 (2006).

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A009-2 cont.

The Project proposes to use up to 500.51 acre-feet of water during construction and up to 39.02 acre-feet per year for long-term operations, from wells located on land which overlies the "Accounting Surface" area designated by U.S. Geological Survey (USGS) Scientific Investigation Report 2008-5113 as indicated on page 3.20-4 of the DEIS. The Accounting Surface is defined to represent the elevation and slope of the static water table in the river aquifer outside the flood plain and the reservoirs of the Colorado River that would exist if the water in the river aquifer were derived only from the river. The accounting surface extends outward from the edges of the flood plain or a reservoir to the subsurface boundary of the river aquifer. The USGS Report indicates that the aquifer underlying the lands is considered to be hydraulically connected to the Colorado River and groundwater withdrawn from wells located on these lands would be replaced by Colorado River water, in part or in total. Wells that have a static water-level elevation near (within ± 0.84 feet at the 95-percent confidence level), equal to, or below the elevation of the Accounting Surface are presumed to yield water that will be replaced by water from the Colorado River. Wells that have a static water-level elevation above the elevation of the Accounting Surface are presumed to yield water that will be replaced by water from precipitation and inflow from tributary valleys. This means that if it is determined that these wells are, in fact, pumping water that will be replaced by water from the Colorado River, the use of such water would need to be accounted for as consumptive use of Colorado River water as required under the Consolidated Decree in *Arizona v. California* as stated on page 3.20-4 of the DEIS.

Table 4.20-4, Estimated Water Requirements of Cumulative Projects, on page 4.20-43 of the DEIS indicates that annual construction water use for the projects listed would exceed 10,000 acre-feet per year for four years. All of California's apportionment to use of Colorado River water during normal, shortage, and Intentionally Created Surplus conditions is presently contracted, meaning that no new water entitlements are available for uses in California during these conditions. The project proponent would have to obtain imported water supplies from an existing contract holder or other non-Colorado river resource. The DEIS addresses these concerns in its mitigation measures, specifically, MM WAT-7 (Colorado River Water Supply Plan) (DEIS at 4.20-27 & -28). However, as explained in Metropolitan's detailed comment no. 32 enclosed with this letter, several of the alternatives identified in this measure are not feasible because most of the identified sources are already fully allocated.

A009-3

Recognizing the limitations on alternate desert supplies, Metropolitan is willing to consider terms and conditions of a water sale agreement to furnish supplemental water to the proponent, if there is evidence of adverse impacts to local supplies consistent with MM WAT-7. Section 131(b) of the Metropolitan Water District Act provides Metropolitan with authority to enter into contracts to provide water to any private corporation or public agency for use in connection with generation of electric power at plants located outside of Metropolitan so long as a major portion of the power is used within Metropolitan's service area in Southern California. Any supplemental water sold for this Project would be an exchange of non-Colorado River water available to Metropolitan for Colorado River water available to Metropolitan.

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A009-4

Consistent with MM WAT-3 (Groundwater Drawdown Monitoring and Reporting Plan), Metropolitan requests that the final EIS address the proponent's proposed method for offsetting use of Chuckwalla Valley groundwater that would be replaced by Colorado River water and any potential direct, indirect, or cumulative impacts from this offset.

A009-5

Finally, Metropolitan requests that it be copied on all groundwater monitoring and reports for the Project because of the potential impacts to Metropolitan's supplies from use of water that would be replaced by Colorado River water.

Metropolitan's detailed comments on the DEIS are enclosed.

We appreciate the opportunity to provide input to your planning process and we look forward to receiving future environmental and related documentation on this project. If we can be of further assistance, please contact Mr. Michael Melanson at (916) 650-2648.

Very truly yours,

Deirdre West
Manager, Environmental Planning Team

DD:dd
(J:\Environmental Planning Team\COMPLETED JOBS\July 2012\Job No. 2012071208)

Enclosures: Map
Detailed Comments on DEIS

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METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

The Metropolitan Water District of Southern California's Detailed Comments on the April 2012 Desert Harvest Solar Project Draft EIS and Draft CDCA Plan Amendment A009-6

1. On page 9, delete the phrase "land owned by Metropolitan Water District of Southern California" from the sentence, "Access to private land and land owned by Metropolitan Water District of Southern California was an obstacle to performing cultural and paleontological surveys on all gen-tie alternatives." Metropolitan has provided access to its land.

2. On page 2-38, in the thirteenth line of the first bullet under the heading Alternative 7, revise "6" to "7" as this column of the table refers to Alternative 7 rather than Alternative 6. A009-7

3. On page 2-65, in the fourth line of the second full paragraph, revise "[new]" to "3".

4. On page 3.20-4, in the first line, revise the reference to the "Colorado River Account Surface Rule" to the "Colorado River Accounting Surface Rule" to be consistent with the title of this section of the DEIS.

5. On page 3.20-6, in the second line of the answer to question 4, revise "Coachella Valley Water Agency" to "Coachella Valley Water District" to reflect the proper name of the District.

6. On page 3.20-15, under the second bullet, delete the text: A009-8

   "A conjunctive use project is proposed for this groundwater basin that would recharge the basin with Colorado River water at Fenner Gap during wet years and extract it down-gradient during drought years (DWR 2004c). This project, the Cadiz Project Groundwater Management Plan, would enable the Metropolitan Water District of Southern California (MWD) to: store Colorado River water in the Cadiz Valley Groundwater Basin; pump the quantity of stored Colorado River water and convey it to the Colorado River Aqueduct when needed; and transfer a portion of naturally occurring/evaporating groundwater from the Cadiz Valley Groundwater Basin to the Colorado River Aqueduct (CRBC 2000)"

as Metropolitan's Board of Directors voted on October 8, 2002 to not proceed with the Cadiz Groundwater Storage and Dry-Year Supply Program. BLM may wish to include information on the Cadiz Valley Water Conservation, Recovery and Storage Project proposed by the Santa Margarita Water District. Information on this project may be found at http://www.smwd.com/operations/cadiz-valley-project.html. The Draft EIR for this project may be found at http://www.smwd.com/operations/the-cadiz-valley-project-ceqa-documents.html.

7. On page 3.20-6, in the sixth line under the first bullet, revise "There are a few wells in the in the CVGB which provide reliable monitoring data from the past 20 years;" to "There A009-9

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A009-9 c

are a few wells in the CVGB which provide reliable monitoring data from the past 20 years;".

8. On page 3.20-20, in the eighth line under the first heading, revise:

"Both analyses describe the Coachella Valley watershed as being comprised of the Palen sub-watershed and the Ford sub-watershed which receive total precipitation in the amounts of 156,000 afy and 159,000 afy, respectively; therefore, the Coachella Valley watershed receives a total precipitation amount of 315,000 afy."

to:

"Both analyses describe the Chuckwalla Valley watershed as being comprised of the Palen sub-watershed and the Ford sub-watershed which receive total precipitation in the amounts of 156,000 afy and 159,000 afy, respectively; therefore, the Chuckwalla Valley watershed receives a total precipitation amount of 315,000 afy."

as the text on page 3.20-10 states:

"The DHSP is located in the Colorado HR, and is within the Chuckwalla HU, and entirely within the Palen HA subdivision of the Chuckwalla HU."

9. On page 3.20-20, revise the second to the last sentence from:

"As noted above, total precipitation in the Coachella Valley watershed equates to 315,000 afy; 3 percent of this estimate is 9,450 afy, as described in the Genesis analysis."

to:

"As noted above, total precipitation in the Chuckwalla Valley watershed equates to 315,000 afy; 3 percent of this estimate is 9,450 afy, as described in the Genesis analysis."

10. On page 3.20-21, revise the last two sentences under the first heading from:

"Therefore, return flows calculated using the 10 percent factor is and 1,090 afy from Tamarisk Lake. Therefore, return flows calculated using the 10 percent factor are approximately 800 afy. (BLM 2011a) 800 afy. (BLM 2011a)"

to:

"Therefore, return flows calculated using the 10 percent factor are approximately 800 afy. (BLM 2011a)."

11. On page 3.20-21, revise the sentence beginning on the sixth line under the second heading from:

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A009-9 cont.

"For the years 1998 through 2001, the California DWR Department of Planning and Local Assistance (CDWR-DPLA) reported that deep percolation of applied urban water in the Chuckwalla Planning Area (assumed to be wastewater return flow) was 500 to 800 afy."

to:

"For the years 1998 through 2001, the California DWR Division of Planning and Local Assistance (CDWR-DPLA) reported that deep percolation of applied urban water in the Chuckwalla Planning Area (assumed to be wastewater return flow) was 500 to 800 afy."

A009-10

12. On page 3.20-21, revise the second sentence under the first heading from:

"All water in the Colorado River is appropriated, meaning it is designated for specific uses and may not be consumed beyond the conditions of designated appropriative rights and associated uses. Due to the hydrologic connection between the CVGB and the Colorado River, all groundwater production at the DHSP site could be considered Colorado River water."

to:

"All water in the Colorado River is apportioned for use, meaning it is designated for specific users and uses and may not be consumed beyond the conditions of designated rights. Due to the hydrologic connection between the CVGB and the Colorado River, all groundwater production at the DHSP site from wells that have a static water-level elevation near (within ± 0.84 feet at the 95-percent confidence level), equal to, or below the elevation of the Accounting Surface are presumed to yield water that will be replaced by water from the Colorado River."

A009-11

based on the text in the second paragraph on page 5 and the first paragraph of page 6 of the U.S. Geological Survey's Scientific Investigations Report 2008–5113.

13. On Page 4.1-6, in the row ID 7, revise "144-foot" to "438-foot lift" in the Project Description column. The 144-foot value is for Iron Mountain Pumping Plant, rather than Eagle Mountain Pumping Plant, the subject of this row.

14. On Page 4.1-17, in the row "Lands and Realty", revise "reality" to "realty" in the "Elements to Consider" column.

15. On page 4-11.8, revise the first bullet from:

"Municipal Water District (MWD) ROW for canals and ditches;"

to:

COMMENT SET A009, CONT.
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

A009-11

"Metropolitan Water District of Southern California (MWD) ROW for canals and ditches;"

16. On page 4-18.5, revise the first sentence from:

"As discussed in Section 4.20, MM WAT-2 would require the applicant to transport water needed for construction of Alternative 4 by truck."

to:

"As discussed in Section 4.20, MM WAT-2 could require the applicant to transport water needed for construction of Alternative 4 by truck."

based on the text of MM WAT-2.

A009-12

17. On Page 4.20-8, revise the first sentence of the third paragraph from:

"If all water required for construction of the project is pumped from saturated sediments above the Colorado River Accounting Surface, it could be concluded that the project would not consume any appropriated Colorado River water."

to:

"If all water required for construction of the project is pumped from saturated sediments above the Colorado River Accounting Surface, it could be presumed the groundwater basin yields water that will be replaced by water from percolation of runoff from the surrounding mountains, and percolation of precipitation to the valley floor."

based on the text in the first paragraph of page 6 of the U.S. Geological Survey's Scientific Investigations Report 2008–5113.

18. On Page 4.20-8, revise the last sentence of the fourth paragraph from:

"Therefore, mitigation is required to avoid potential effects associated with use of appropriated Colorado River water."

to:

"Therefore, mitigation is required to avoid potential effects associated with use of groundwater that is presumed to be replaced by water from the Colorado River."

based on the text in the first paragraph of page 6 of the U.S. Geological Survey's Scientific Investigations Report 2008–5113.

19. On Page 4.20-8, revise the last sentence on the page from:

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METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

A009-12 cont.

> "Construction of the project would include implementation of Mitigation Measure WAT-7, which is presented under the "Mitigation Measures" subheading and summarized below, as relevant to use of appropriated Colorado River water."

> to:

> "Construction of the project would include implementation of Mitigation Measure WAT-7, which is presented under the "Mitigation Measures" subheading and summarized below, as relevant to use of groundwater that is presumed to be replaced by water from the Colorado River."

based on the text in the first paragraph of page 6 of the U.S. Geological Survey's Scientific Investigations Report 2008–5113.

20. On Page 4.20-9, revise the first sentence on the page from:

> "MM WAT-7 (Colorado River Water Supply Plan) would ensure that if the project results in pumping of any Colorado River water, conservation actions would be implemented to 'replace' the Colorado River water on an acre-foot by acre-foot basis."

> to:

> "MM WAT-7 (Colorado River Water Supply Plan) would ensure that if the project results in pumping of any groundwater that would be replaced by Colorado River water, conservation actions would be implemented to 'replace' the groundwater on an acre-foot by acre-foot basis."

based on the text in the first paragraph of page 6 of the U.S. Geological Survey's Scientific Investigations Report 2008–5113.

A009-13

21. With respect to the first sentence in the second paragraph on page 4.20-15:

> "The CVGB is not currently affected by long-term overdraft conditions, and the hydrologic budget presented in Table 3.20-2 indicates that sufficient groundwater supply is available in the CVGB to meet the project's operational water requirements of 26.02 to 39.02 afy, which is roughly 176 percent lower than the project's construction water requirements of 400.51 to 500.51 afy."

it is unclear how the 176 percent value was determined as [(400.51-26.02)/400.51] x 100=93.5 percent lower and [(500.51-39.02)/500.51] x 100=92.2 percent lower.

A009-14

22. On Page 4.20-15, revise the last sentence of the second paragraph from:

> "As specified in MM WAT-3, annual groundwater monitoring data reports will be submitted by the Applicant to the BLM and the Colorado River Basin RWQCB, and if

COMMENT SET A009, CONT.
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

A009-14

corrective action(s) will be required if these reports indicate groundwater trends such as overdraft or drawdown."

to:

"As specified in MM WAT-3, annual groundwater monitoring data reports will be submitted by the Applicant to the BLM and the Colorado River Basin RWQCB, and corrective action(s) will be required if these reports indicate groundwater trends such as overdraft or drawdown."

23. On page 4.20-16, revise the last sentence of the first full paragraph from:

"Operation and maintenance would not substantially alter existing drainage patters or result in substantial erosion, siltation, or flooding on or off site."

to:

"Operation and maintenance would not substantially alter existing drainage patterns or result in substantial erosion, siltation, or flooding on or off site."

24. On page 4.20-18, following the first two sentences of the fourth full paragraph:

"Although no water supply requirements have been identified for decommissioning of the project, it is reasonably assumed that water would be required for soil conditioning and dust control. The WSA included as Appendix E to this EIS indicates that sufficient water supply is anticipated to be available for the project, and the project would not result in adverse effects to water supply reliability."

insert:

"If decommissioning results in pumping of any groundwater that would be replaced by Colorado River water, conservation actions would be implemented to 'replace' the groundwater on an acre-foot by acre-foot basis."

A009-15

25. On page 4.20-22, revise the third sentence of the first full paragraph from:

"Assuming the project used of 12,000 gallon trucks to transport the water, between 10 and 50 round trip truck trips would be required to transport the water to the site during construction."

to:

"Assuming the project used 12,000 gallon trucks to transport the water, between 10 and 50 round trip truck trips per day would be required to transport the water to the site during construction."

COMMENT SET A009, CONT.
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A009-15 cont.

26. On page 4.20-23, revise the last sentence of the third paragraph and the first sentence of the fourth paragraph from:

"Therefore, the water truck trips would not result in an unavoidable adverse GHG effects.

If the project's water supply is provided as groundwater pumped from an off-site well within the CVGB, or as some other off-site water source, it would trucked to the project site and stored in an on-site storage tank(s)."

to:

"Therefore, the water truck trips would not result in an unavoidable adverse GHG effect.

If the project's water supply is provided as groundwater pumped from an off-site well within the CVGB, or some other off-site water source, it would be trucked to the project site and stored in an on-site storage tank(s)."

A009-16

27. On page 4.20-23, with respect to the last sentence of the fourth paragraph:

"If an off-site non-groundwater supply is used for the water (such as purchased from MWD or another local purveyor), potential effects associated with transporting the supply to the project site would be comparable to as described for an off-site groundwater supply."

The potential effects associated with water purchased from MWD would depend on the method of delivery (e.g. discharge to a spreading ground for recharge up-gradient of the Project site, or construction of a conveyance facility to the Project site.)

A009-17

28. On page 4.20-26, revise the second to the last sentence of the first paragraph from:

"All be BMPs required by the SWPP shall be checked and maintained regularly and after all larger storm events."

to:

"All BMPs required by the SWPP shall be checked and maintained regularly and after all larger storm events."

29. On page 4.20-27, revise the second sentence of MM WAT-7 from:

"The purpose of the Colorado River Water Supply Plan is to ensure that if the project consumes any Colorado River water, an equal amount of water will be 'replaced' within the watershed through the implementation of conservation actions."

to:

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METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

A009-17

> "The purpose of the Colorado River Water Supply Plan is to ensure that if the project consumes any groundwater that would be replaced by Colorado River water, an equal amount of water will be 'replaced' within the watershed through the implementation of conservation actions."

based on the text in the first paragraph of page 6 of the U.S. Geological Survey's Scientific Investigations Report 2008–5113.

30. On page 4.20-27, revise the first two bullets of MM WAT-7 from:

- "Identification of water offset activities and associated water source(s) to replace the quantity of water diverted from the Colorado River over the life of the project on an acre foot per acre foot basis;
- Demonstration of how water diverted from the Colorado River will be replaced for each identified activity;"

to:

- "Identification of water offset activities and associated water source(s) to replace the quantity of groundwater that would be replaced by Colorado River water over the life of the project on an acre foot per acre foot basis;
- Demonstration of how groundwater that would be replaced by Colorado River water will be replaced for each identified activity;"

based on the text in the first paragraph of page 6 of the U.S. Geological Survey's Scientific Investigations Report 2008–5113.

31. On page 4.20-28, revise the fifth bullet from:

- "Monitoring and Reporting Plan outlining the steps necessary and proposed frequency of reporting to show that each identified activity is achieving the intended benefits and replacing Colorado River diversions."

to:

- "Monitoring and Reporting Plan outlining the steps necessary and proposed frequency of reporting to show that each identified activity is achieving the intended benefits and replacing groundwater that would be replaced by Colorado River water."

A009-18

32. With respect to the measures of water conservation specified on page 4.20-28, several of them are not feasible because the supplies are already fully allocated. For example, irrigation improvements in the Palo Verde Irrigation District would not result in water becoming available to the proponent of the Desert Harvest Solar Farm, as any water unused by Palo Verde Irrigation District becomes available to Metropolitan in accordance

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with the 2003 Colorado River Water Delivery Agreement executed by Metropolitan, the Secretary of the Interior, Imperial Irrigation District, Coachella Valley Water District, and San Diego County Water Authority. As the use of all Colorado River water available to California in shortage, normal, or Intentionally Created Surplus conditions is already allocated by the Department of the Interior and its use is limited to within each entity's service area under executed water delivery contracts, no water allotments within the Colorado River Basin are available for purchase by the proponent of the Desert Harvest Solar Farm under those conditions. Implementation of conservation programs to conserve Colorado River water in the floodplain communities would not make water available to the proponent of the Desert Harvest Solar Farm as all water unused by holders of higher priorities becomes available to Metropolitan in accordance with the water delivery contracts which have been executed by the Department of the Interior. Participation in the U.S. Bureau of Land Management's Tamarisk Removal Program would not make Colorado River water available to the proponent of the Desert Harvest Solar Farm as use of Colorado River water by phreatophytes such as tamarisk is not charged as a use of water for U.S. Supreme Court Decree accounting purposes by the U.S. Bureau of Reclamation. Thus, each of these measures of water conservation should be removed from the Colorado River Water Supply Plan. A009-18 cont.

33. With respect to the first sentence of the second full paragraph on page 4.20-28: A009-19

> "If the Applicant has filed an application to the U.S. Bureau of Reclamation (USBR) to obtain an allocation of water from the Colorado River, this allocation(s) can be used to satisfy some or all of the water conservation offsets on an acre-foot per acre-foot basis."

it would be legally insufficient for the proponent to merely file an application with USBR as a request for an allocation would not guarantee that an allocation would be granted. Indeed, all of California's apportionment to use of Colorado River water during shortage, normal, and Intentionally Created Surplus conditions has already been allocated by the Department of the Interior.

34. On page 4.20-28, revise the first clause of the fourth full paragraph from: A009-20

> "If the project does not result in diversion of Colorado River water (via pumping groundwater from below 234 feet amsl) it will not be necessary to implement the Colorado River Water Supply Plan;"

to:

> "If the project does not result in use of groundwater which would be replaced by Colorado River water (via pumping from near (within ± 0.84 feet at the 95-percent confidence level), equal to, or below 234 feet amsl) it will not be necessary to implement the Colorado River Water Supply Plan;"

35. On page 4.20-30, revise the first clause of the fourth full paragraph from: A009-21

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A009-21 c

"Table 3.20-2 identifies that the safe yield of the CVGB is estimated to be 2,623;"

to:

"Table 3.20-2 identifies that the safe yield of the CVGB is estimated to be 2,623 acre-feet per year;"

36. On page 4.20-31, revise the fifth sentence of the fifth paragraph from:

    "The estimated safe yield of the CVGB is to be 2,623;…."

    to:

    "The estimated safe yield of the CVGB is estimated to be 2,623 acre-feet per year;…."

37. On page 4.20-33, revise the fourth sentence of the third paragraph from:

    "The estimated safe yield of the CVGB is to be 2,623;"

    to:

    "The estimated safe yield of the CVGB is estimated to be 2,623 acre-feet per year;…."

38. On page 4.20-37, revise the fifth sentence of the fifth paragraph from:

    "Decommissioning of Alternative C involve the removal of gen-tie infrastructure, including all towers and transmission cables."

    to:

    "Decommissioning of Alternative C involves the removal of gen-tie infrastructure, including all towers and transmission cables."

39. On page 4.20-43, revise the value in the "Combined Western and Eastern Chuckwalla Valley Groundwater Basin" row in the column labeled "2013" from "2,948.85" to "1,948.85" to correct an addition error.

40. On page 4.20-44, revise the first sentence of note 3 from:

    "The Colorado River Substation Expansion project would pump 300,000 gallons per day (gpd) over the first four to six months, or a total of 110.5 to 165.7 acre-feet, and 120,000 gpd over the following 18 months, or 198.9;…."

    to:

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A009-21 cont.

"The Colorado River Substation Expansion project would pump 300,000 gallons per day (gpd) over the first four to six months, or a total of 110.5 to 165.7 acre-feet, and 120,000 gpd over the following 18 months, or 198.9 acre-feet;…."

41. On page 4.20-48, revise the second sentence of the second full paragraph from:

"This does not mean that such flooding potential does not exist, but rather that it has not be quantified or mapped."

to:

"This does not mean that such flooding potential does not exist, but rather that it has not been quantified or mapped."

42. On page 4.30-51, revise the third sentence of the third full paragraph from:

"Alternative B would require a water supply of 6.25 afy, is accounted for in the water availability projections included in the WSA provided as Appendix E. "

to:

"Alternative B would require a water supply of 6.25 afy, and is accounted for in the water availability projections included in the WSA provided as Appendix E. "

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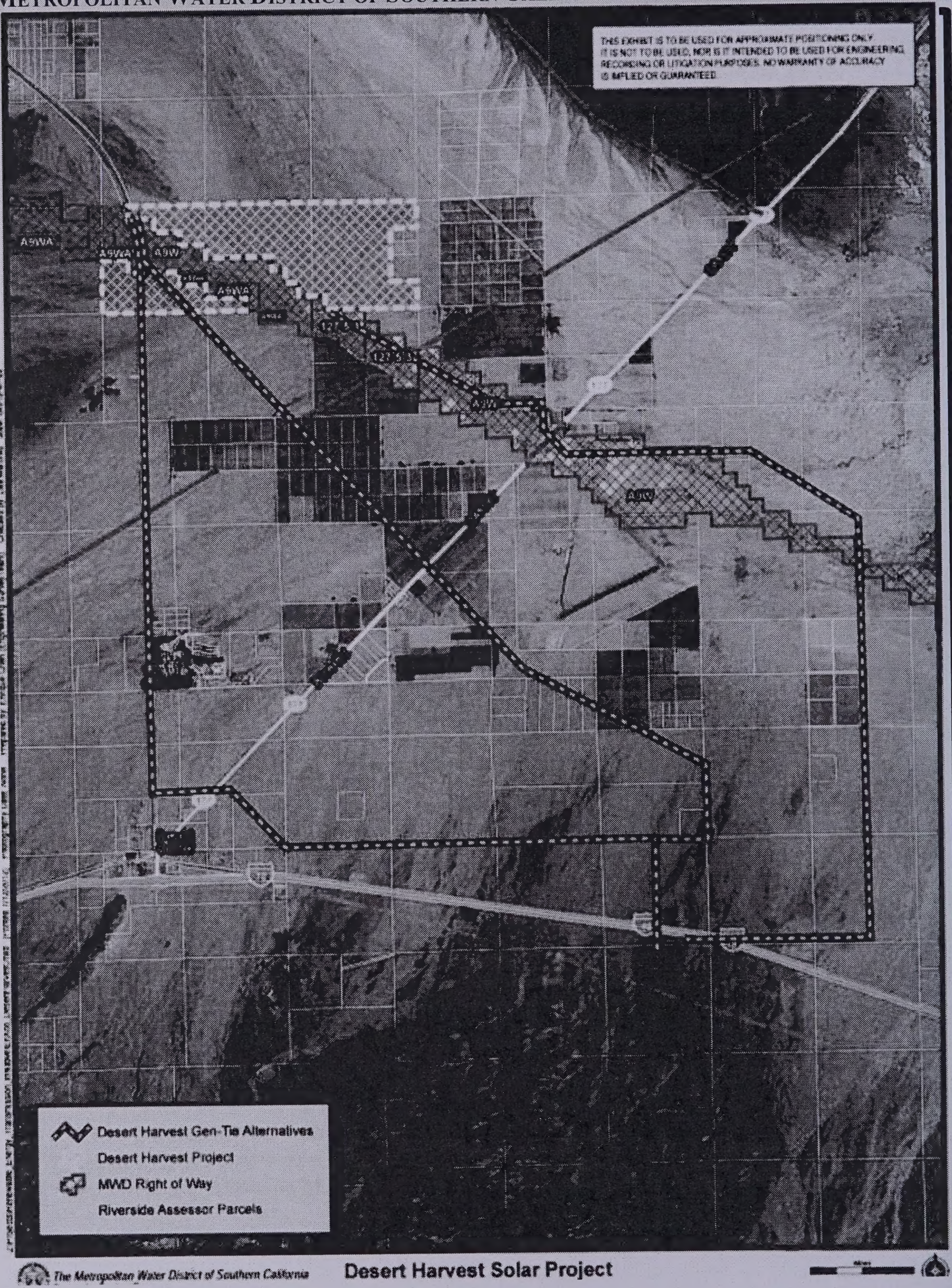
A009-21 c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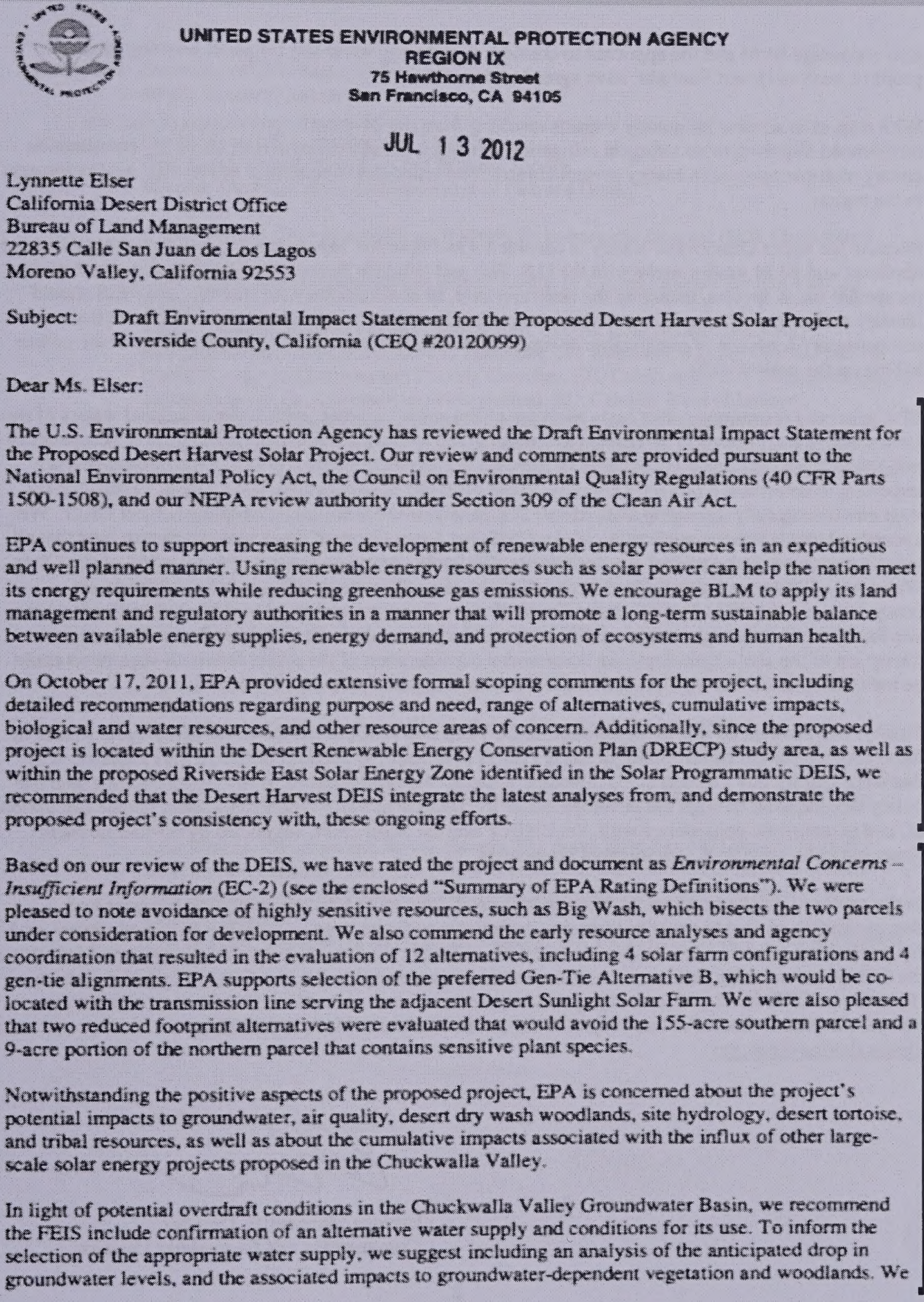
A9WA
A9W
Desert Harvest Gen-Tie Alternatives
Desert Harvest Project
MWD Right of Way
Riverside Assessor Parcels
The Metropolitan Water District of Southern California
Desert Harvest Solar Project

COMMENT SET A010
U.S. ENVIRONMENTAL PROTECTION AGENCY



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

JUL 13 2012

Lynnette Elser
California Desert District Office
Bureau of Land Management
22835 Calle San Juan de Los Lagos
Moreno Valley, California 92553

Subject: Draft Environmental Impact Statement for the Proposed Desert Harvest Solar Project, Riverside County, California (CEQ #20120099)

Dear Ms. Elser:

A010-1

The U.S. Environmental Protection Agency has reviewed the Draft Environmental Impact Statement for the Proposed Desert Harvest Solar Project. Our review and comments are provided pursuant to the National Environmental Policy Act, the Council on Environmental Quality Regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

EPA continues to support increasing the development of renewable energy resources in an expeditious and well planned manner. Using renewable energy resources such as solar power can help the nation meet its energy requirements while reducing greenhouse gas emissions. We encourage BLM to apply its land management and regulatory authorities in a manner that will promote a long-term sustainable balance between available energy supplies, energy demand, and protection of ecosystems and human health.

On October 17, 2011, EPA provided extensive formal scoping comments for the project, including detailed recommendations regarding purpose and need, range of alternatives, cumulative impacts, biological and water resources, and other resource areas of concern. Additionally, since the proposed project is located within the Desert Renewable Energy Conservation Plan (DRECP) study area, as well as within the proposed Riverside East Solar Energy Zone identified in the Solar Programmatic DEIS, we recommended that the Desert Harvest DEIS integrate the latest analyses from, and demonstrate the proposed project's consistency with, these ongoing efforts.

A010-2

Based on our review of the DEIS, we have rated the project and document as *Environmental Concerns – Insufficient Information* (EC-2) (see the enclosed "Summary of EPA Rating Definitions"). We were pleased to note avoidance of highly sensitive resources, such as Big Wash, which bisects the two parcels under consideration for development. We also commend the early resource analyses and agency coordination that resulted in the evaluation of 12 alternatives, including 4 solar farm configurations and 4 gen-tie alignments. EPA supports selection of the preferred Gen-Tie Alternative B, which would be co-located with the transmission line serving the adjacent Desert Sunlight Solar Farm. We were also pleased that two reduced footprint alternatives were evaluated that would avoid the 155-acre southern parcel and a 9-acre portion of the northern parcel that contains sensitive plant species.

Notwithstanding the positive aspects of the proposed project, EPA is concerned about the project's potential impacts to groundwater, air quality, desert dry wash woodlands, site hydrology, desert tortoise, and tribal resources, as well as about the cumulative impacts associated with the influx of other large-scale solar energy projects proposed in the Chuckwalla Valley.

In light of potential overdraft conditions in the Chuckwalla Valley Groundwater Basin, we recommend the FEIS include confirmation of an alternative water supply and conditions for its use. To inform the selection of the appropriate water supply, we suggest including an analysis of the anticipated drop in groundwater levels, and the associated impacts to groundwater-dependent vegetation and woodlands. We

COMMENT SET A010, CONT.
U.S. ENVIRONMENTAL PROTECTION AGENCY

also encourage BLM and the applicant to consider eliminating water use for panel washing as similar projects, such as Desert Sunlight, have agreed to do. A010-2 c

With respect to adverse air quality impacts resulting from the 24-month construction period, we recommend requiring more stringent mitigation measures, phased construction, and early coordination among multiple renewable energy project construction schedules to minimize adverse air quality impacts in the region. A010-3

Because the upper Chuckwalla Valley is considered an important habitat linkage, we recommend that the applicant and BLM work closely with the U.S. Fish and Wildlife Service to protect habitat connectivity for special status species, including the desert tortoise. In coordination with USFWS, the FEIS should identify sufficient lands for habitat compensation for the project's impacts, in order to ensure that compensatory lands are of comparable or superior quality, and are suitable compensation for the unique habitat on the project's site. A010-4

EPA generally recommends that early analyses of key resource areas, such as jurisdictional waters of the Unites States and impacts to threatened and endangered species, as well as identification of compensatory mitigation lands, be completed as early as possible, for integration into a DEIS. This information is important to determine a project's viability, avoid potential project delays, and assist in identifying the least environmentally damaging alternative. Such analyses were not included in the subject DEIS. We understand that, since the publication of the DEIS, the Army Corps of Engineers has determined that all aquatic resources on the project site are intrastate isolated waters not subject to section 404 of the Clean Water Act. While not federally jurisdictional, such resources are important features of the desert ecosystem, and we recommend that avoidance of those drainages and the desert wash woodlands on the site be maximized through design modifications to the photovoltaic array layout. To further minimize disruption of the site's hydrology, we recommend consideration of the extent to which vegetation could be maintained under the high-profile single-axis tracking panel proposed in Alternative 7. A010-5

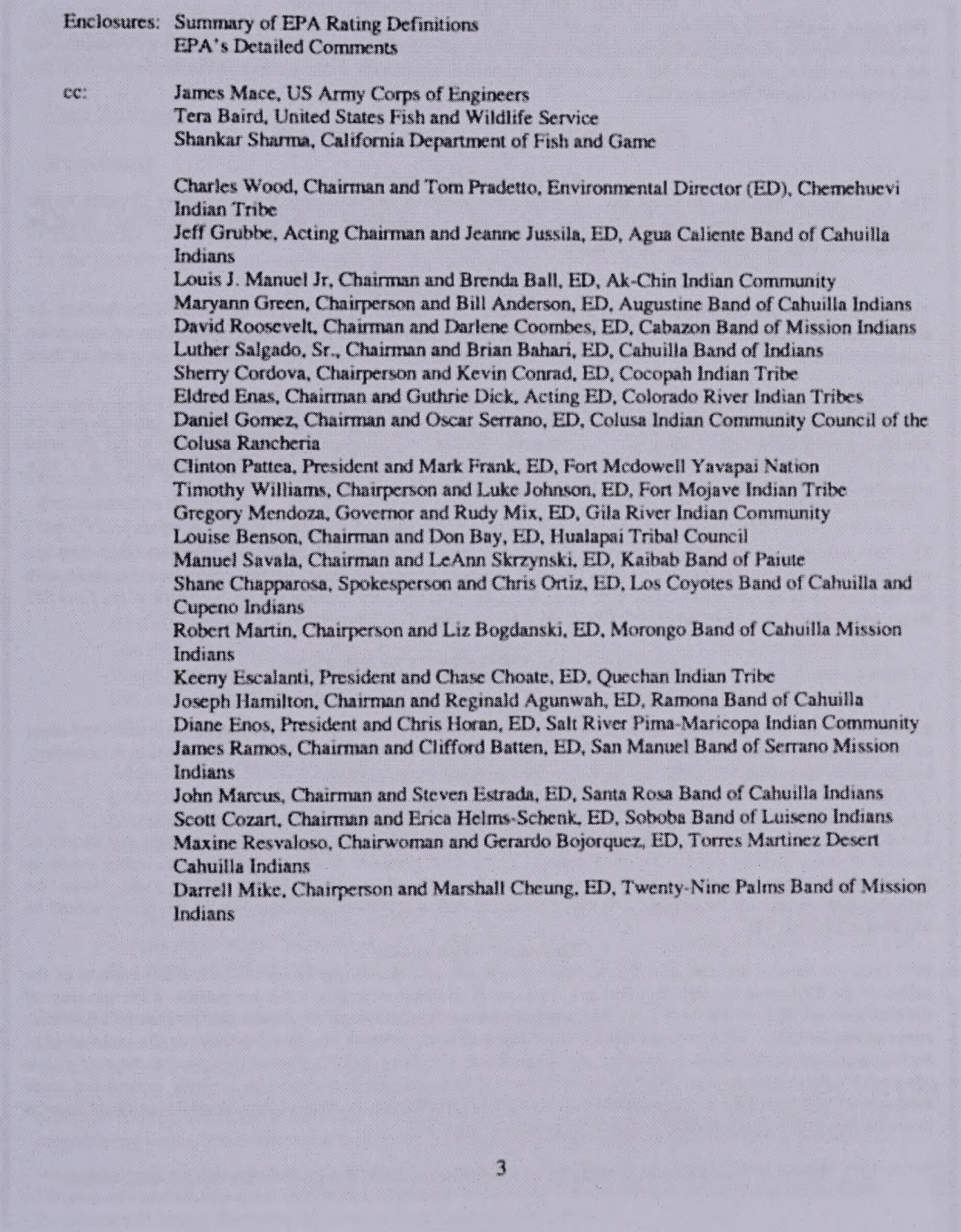
Finally, we recommend that BLM commit, in the FEIS and ROD, to measures for this project similar to those adopted for the Desert Sunlight Solar Project to protect the portions of the subject Right-of-Way that were specifically avoided due to resource impacts. We encourage BLM to consider such a land use policy modification through the development of the DRECP as well. The FEIS should update discussions of, and demonstrate consistency with, the DRECP and the Solar PEIS, supported by up-to-date maps illustrating proposed SEZ development boundaries. A010-6

In the enclosed detailed comments, we provide specific recommendations regarding analyses and documentation needed to assist in assessing potential significant impacts from the proposed project, and for minimizing adverse impacts. We are available to further discuss all recommendations provided. When the FEIS is released for public review, please send two hard copies and two CDs to the address above (Mail Code: CED-2). If you have any questions, please contact me at (415) 972-3843 or contact Tom Plenys, the lead reviewer for this Project. Tom can be reached at (415) 972-3238 or plenys.thomas@epa.gov.

Sincerely,

Enrique Manzanilla, Director
Communities and Ecosystems Division

COMMENT SET A010, CONT.
U.S. ENVIRONMENTAL PROTECTION AGENCY



Enclosures: Summary of EPA Rating Definitions
EPA's Detailed Comments

cc: James Mace, US Army Corps of Engineers
Tera Baird, United States Fish and Wildlife Service
Shankar Sharma, California Department of Fish and Game

Charles Wood, Chairman and Tom Pradetto, Environmental Director (ED), Chemehuevi Indian Tribe
Jeff Grubbe, Acting Chairman and Jeanne Jussila, ED, Agua Caliente Band of Cahuilla Indians
Louis J. Manuel Jr, Chairman and Brenda Ball, ED, Ak-Chin Indian Community
Maryann Green, Chairperson and Bill Anderson, ED, Augustine Band of Cahuilla Indians
David Roosevelt, Chairman and Darlene Coombes, ED, Cabazon Band of Mission Indians
Luther Salgado, Sr., Chairman and Brian Bahari, ED, Cahuilla Band of Indians
Sherry Cordova, Chairperson and Kevin Conrad, ED, Cocopah Indian Tribe
Eldred Enas, Chairman and Guthrie Dick, Acting ED, Colorado River Indian Tribes
Daniel Gomez, Chairman and Oscar Serrano, ED, Colusa Indian Community Council of the Colusa Rancheria
Clinton Pattea, President and Mark Frank, ED, Fort Mcdowell Yavapai Nation
Timothy Williams, Chairperson and Luke Johnson, ED, Fort Mojave Indian Tribe
Gregory Mendoza, Governor and Rudy Mix, ED, Gila River Indian Community
Louise Benson, Chairman and Don Bay, ED, Hualapai Tribal Council
Manuel Savala, Chairman and LeAnn Skrzynski, ED, Kaibab Band of Paiute
Shane Chapparosa, Spokesperson and Chris Ortiz, ED, Los Coyotes Band of Cahuilla and Cupeno Indians
Robert Martin, Chairperson and Liz Bogdanski, ED, Morongo Band of Cahuilla Mission Indians
Keeny Escalanti, President and Chase Choate, ED, Quechan Indian Tribe
Joseph Hamilton, Chairman and Reginald Agunwah, ED, Ramona Band of Cahuilla
Diane Enos, President and Chris Horan, ED, Salt River Pima-Maricopa Indian Community
James Ramos, Chairman and Clifford Batten, ED, San Manuel Band of Serrano Mission Indians
John Marcus, Chairman and Steven Estrada, ED, Santa Rosa Band of Cahuilla Indians
Scott Cozart, Chairman and Erica Helms-Schenk, ED, Soboba Band of Luiseno Indians
Maxine Resvaloso, Chairwoman and Gerardo Bojorquez, ED, Torres Martinez Desert Cahuilla Indians
Darrell Mike, Chairperson and Marshall Cheung, ED, Twenty-Nine Palms Band of Mission Indians

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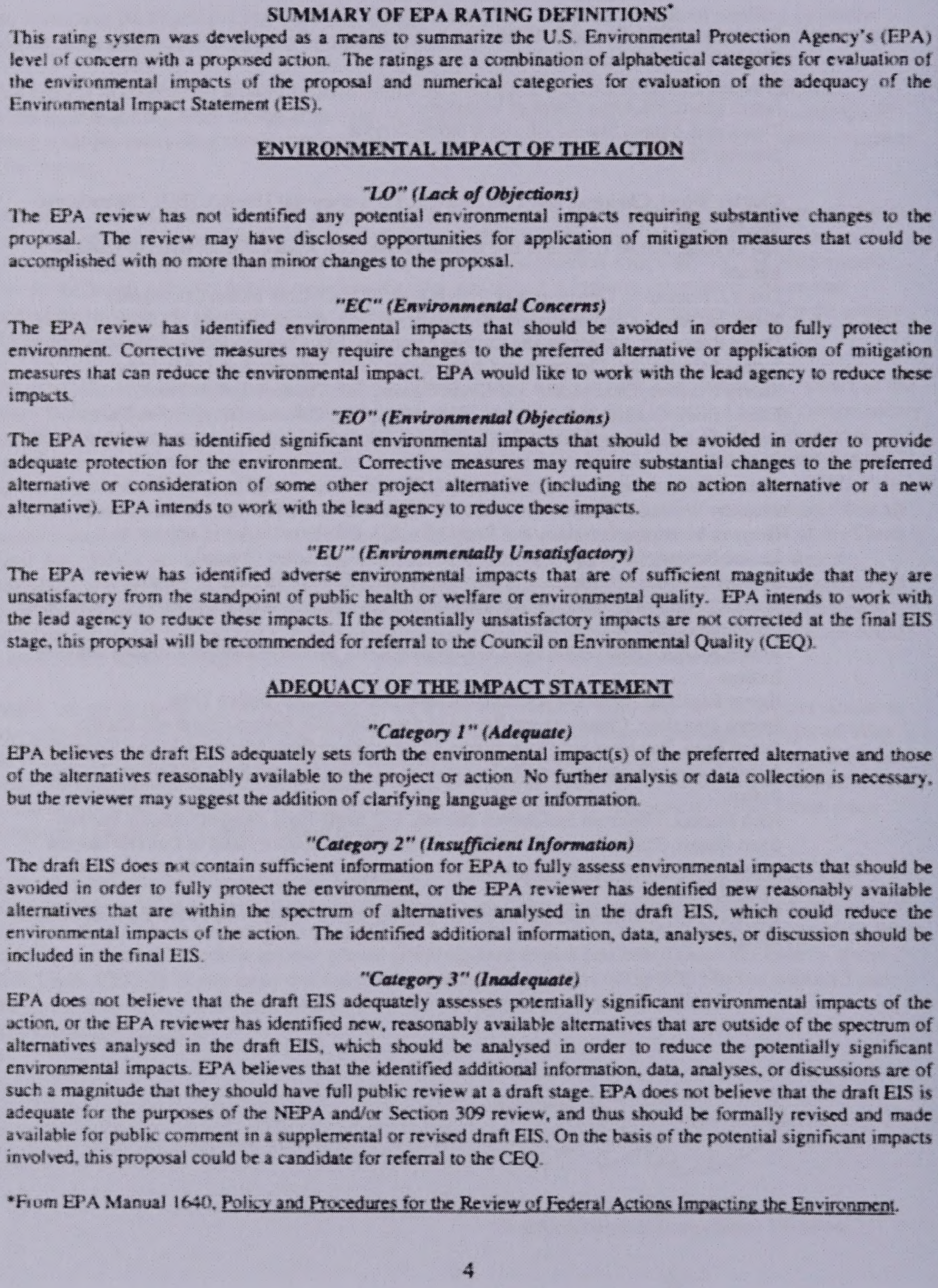
A010-7



SUMMARY OF EPA RATING DEFINITIONS*

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

ADEQUACY OF THE IMPACT STATEMENT

"Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment.

COMMENT SET A010, CONT.
U.S. ENVIRONMENTAL PROTECTION AGENCY

A010-7 cont.

U.S. EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE PROPOSED DESERT HARVEST SOLAR PROJECT, RIVERSIDE COUNTY, CALIFORNIA, JULY 13, 2012

Water Resources

Groundwater

We are concerned about the potential significant groundwater drawdown and cumulative impacts to the Chuckwalla Valley Groundwater Basin (CVGB) associated with the construction and operational phases of the proposed project in conjunction with the reasonably foreseeable projects in the vicinity.

Construction of the proposed 150 MW project would require 800 to 1,000 acre-feet (AF) of water at an average pumping rate of 400 to 500 acre feet per year (AFY) over a period of 24 months, followed by 39 AFY during operations (pgs. 2-12, 3.20-7 & 4.20-21).

As determined by the Water Supply Assessment for the proposed project, overdraft conditions in the CVGB are anticipated to occur during each year of project operations, projected through 2043 (p. 4.20-21). Negative balances are expected to exceed 6,700 AFY in 2013 thru 2017 (p. 4.20-45). Mitigation measure MM WAT-2 would allow the applicant to use offsets for groundwater use contingent on demonstration that an amount of groundwater equal to that consumed by the project is conserved within the CVGB on an AF basis. This measure also instructs the applicant to identify an alternative water source for the project from any other source but the CVGB; however, there does not appear to be a requirement, or trigger event, for its use.

> *Recommendations:*
> The FEIS should identify the alternative non-CVGB water source, as recommended by MM WAT-2, and analyze potential impacts to groundwater and air quality (e.g. from transportation) that may result. Clarify the circumstances under which this alternative water supply would be used.
>
> Address, in the FEIS, what mitigation measures would be taken, and by whom, should groundwater resources in the basins become overextended to the point that further curtailment is necessary due to, for example, additional growth, the influx of large-scale solar projects, drought, climate change, or the utilization of existing or pending water rights in the basin.
>
> Reconcile, in the FEIS, the statement that Table 3.20-2 indicates sufficient water supply is available within the CVGB to meet the project's water requirements (p. 4.17-25) with the Water Supply Assessment's findings that the CVGB will be in overdraft conditions as of 2013, in part, as a result of the project's construction water supply demands (p. 4.20-45).

A010-8

The DEIS for the Desert Sunlight Solar Farm Project concluded that, in conjunction with the neighboring Eagle Mountain Pumped Storage Project, groundwater levels could decline in excess of 6 feet in the vicinity of Desert Sunlight(Desert Sunlight DEIS p. 4.17-37). As prior BLM NEPA documents have noted, even modest drawdowns of 0.3 foot can adversely affect vegetation if groundwater drops below the effective rooting levels for a sustained period of time.[1] A drop in groundwater levels could also impact neighboring wells, lower the water table, and adversely affect groundwater-dependent vegetation and

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[1] Bureau of Land Management and California Energy Commission, March 2010. Staff Assessment and Draft Environmental Impact Statement for Genesis Solar Energy Project, p. C.2-4.

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COMMENT SET A010, CONT.
U.S. ENVIRONMENTAL PROTECTION AGENCY

A010-8 c

woodlands. MM VEG-10 and MM WAT-3 discuss measures to be taken if water levels decline 1 foot or more below the baseline trend, and if levels at off-site wells drop over 5 feet (pgs 4.3-36 & 4.20-24); however, the likelihood of these scenarios is not analyzed.

> *Recommendations:*
> Include, in Section 4.20 of the FEIS, a numerical analysis, based on expected pumping rates and overdraft conditions mentioned above, of the anticipated drop in groundwater levels and associated impacts to groundwater-dependent vegetation and woodlands.
>
> The FEIS should evaluate whether operations for all reasonably foreseeable projects could result in indirect impacts to the Palo Verde Mesa Groundwater Basin by inducing underflow. Such basin balance analyses for the cumulative effects to the Palo Verde Mesa Basin should be included in the FEIS.

A010-9

Panel washing for the proposed project is expected to take place 2 to 3 times per year (p. 2-18). The Desert Sunlight Solar Farm applicant has agreed to the condition that water will not be used for panel washing. It is also our understanding that First Solar's Silver State facility in Nevada will also not require PV panel washing.

> *Recommendation:*
> In light of the overdraft conditions of the CVGB, and the technical feasibility of eliminating periodic washing of solar panels, consider adopting, as a condition of certification in the FEIS and ROD, that water will not be used for panel washing.

Drainages and Ephemeral Washes

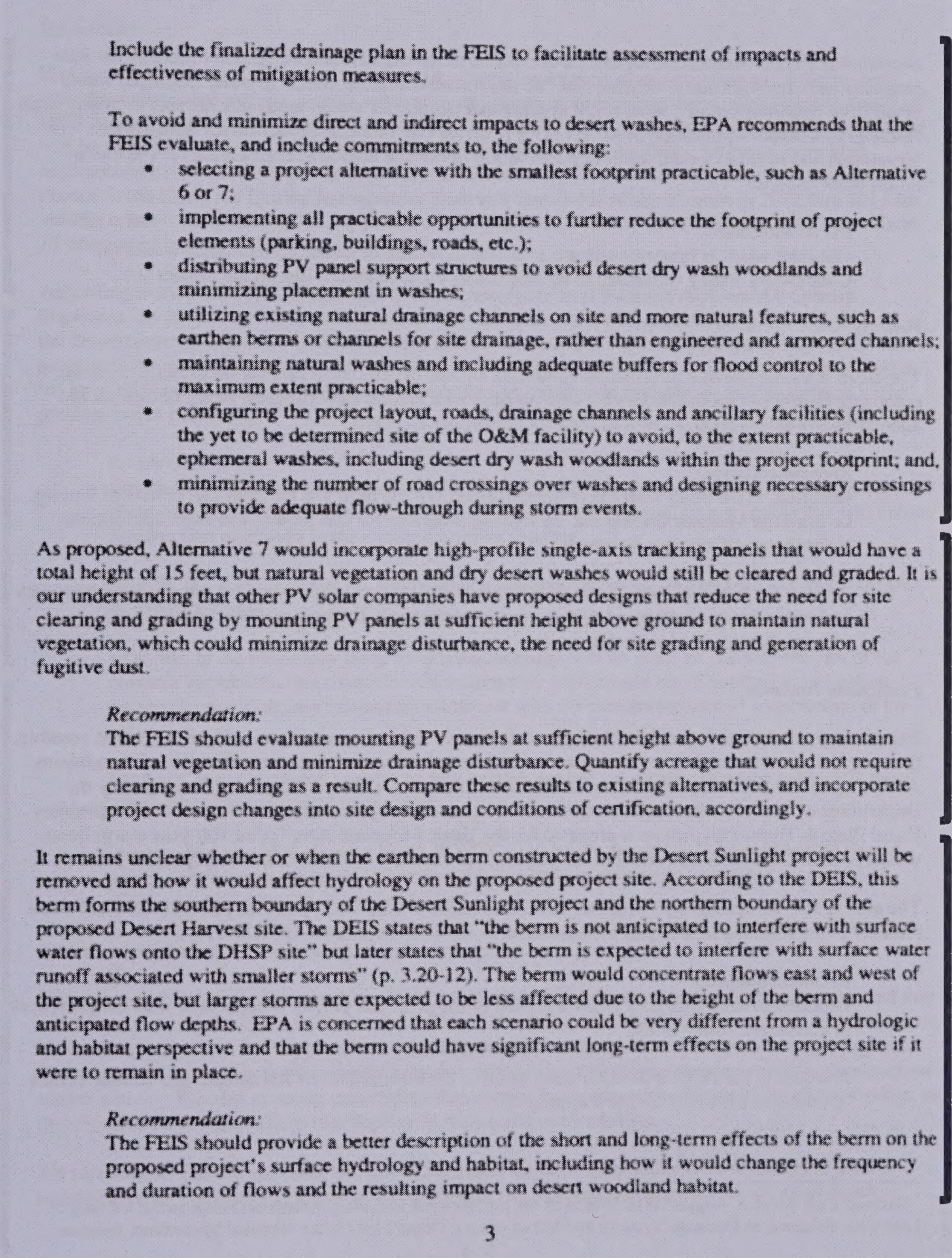
A010-10

Twelve natural washes traverse the proposed project site and they perform a diversity of hydrologic, biochemical, and geochemical functions that directly affect the integrity and functional condition of higher-order waters downstream. Ephemeral washes also provide habitat for breeding, shelter, foraging, and movement of wildlife. Many plant populations are dependent on these aquatic ecosystems and adapted to their unique conditions. The potential damage that could result from disturbance of flat-bottomed washes includes alterations to the hydrological functions that natural channels provide in arid ecosystems, such as adequate capacity for flood control, energy dissipation, and sediment movement; as well as impacts to valuable habitat for desert species.

The DEIS estimates that 98 to 180 acres of Blue Palo Verde-Ironwood Woodland would be impacted by the project solar site (Table 4.3-1). The gen-tie alternatives would impact an additional 39 to 60 acres of this habitat (Table 4.3-2). Blue Palo Verde-Ironwood Woodland is largely comprised of California Department of Fish and Game jurisdictional desert dry wash habitat. The DEIS states that 100 percent of the solar field would be impacted by some form of soil disturbance from either compaction, micro-grading, or disc-and-roll grading (p. 2-6). Clearing, grading and compaction of the solar farm site in preparation for project construction, in addition to access roads and transmission line development, would permanently impact 79 to 113 acres of CDFG jurisdictional streambeds on site (Table 4.3-1) and 39 to 60 acres along the Gen-Tie alignments (Table 4.3-2).

> *Recommendations:*
> Demonstrate that downstream flows would not be adversely impacted due to proposed changes to natural washes and on-site disc-and-roll grading.

COMMENT SET A010, CONT.
U.S. ENVIRONMENTAL PROTECTION AGENCY



Include the finalized drainage plan in the FEIS to facilitate assessment of impacts and effectiveness of mitigation measures. A010-10 cont.

To avoid and minimize direct and indirect impacts to desert washes, EPA recommends that the FEIS evaluate, and include commitments to, the following:

- selecting a project alternative with the smallest footprint practicable, such as Alternative 6 or 7;
- implementing all practicable opportunities to further reduce the footprint of project elements (parking, buildings, roads, etc.);
- distributing PV panel support structures to avoid desert dry wash woodlands and minimizing placement in washes;
- utilizing existing natural drainage channels on site and more natural features, such as earthen berms or channels for site drainage, rather than engineered and armored channels;
- maintaining natural washes and including adequate buffers for flood control to the maximum extent practicable;
- configuring the project layout, roads, drainage channels and ancillary facilities (including the yet to be determined site of the O&M facility) to avoid, to the extent practicable, ephemeral washes, including desert dry wash woodlands within the project footprint; and,
- minimizing the number of road crossings over washes and designing necessary crossings to provide adequate flow-through during storm events.

As proposed, Alternative 7 would incorporate high-profile single-axis tracking panels that would have a total height of 15 feet, but natural vegetation and dry desert washes would still be cleared and graded. It is our understanding that other PV solar companies have proposed designs that reduce the need for site clearing and grading by mounting PV panels at sufficient height above ground to maintain natural vegetation, which could minimize drainage disturbance, the need for site grading and generation of fugitive dust. A010-11

Recommendation:
The FEIS should evaluate mounting PV panels at sufficient height above ground to maintain natural vegetation and minimize drainage disturbance. Quantify acreage that would not require clearing and grading as a result. Compare these results to existing alternatives, and incorporate project design changes into site design and conditions of certification, accordingly.

It remains unclear whether or when the earthen berm constructed by the Desert Sunlight project will be removed and how it would affect hydrology on the proposed project site. According to the DEIS, this berm forms the southern boundary of the Desert Sunlight project and the northern boundary of the proposed Desert Harvest site. The DEIS states that "the berm is not anticipated to interfere with surface water flows onto the DHSP site" but later states that "the berm is expected to interfere with surface water runoff associated with smaller storms" (p. 3.20-12). The berm would concentrate flows east and west of the project site, but larger storms are expected to be less affected due to the height of the berm and anticipated flow depths. EPA is concerned that each scenario could be very different from a hydrologic and habitat perspective and that the berm could have significant long-term effects on the project site if it were to remain in place. A010-12

Recommendation:
The FEIS should provide a better description of the short and long-term effects of the berm on the proposed project's surface hydrology and habitat, including how it would change the frequency and duration of flows and the resulting impact on desert woodland habitat.

COMMENT SET A010, CONT.
U.S. ENVIRONMENTAL PROTECTION AGENCY

A010-13

Section 4.20, Water Resources, includes a discussion of the impacts and mitigation measures for state jurisdictional drainages and concludes that "no unavoidable adverse effects to water resources would result from implementation"; however, it appears that the project would result in a net loss of desert wash resource functions. Application of MM VEG-6 (Provide Off-Site Compensation for Impacts to Vegetation and Habitat) would result in preservation of off-site habitat to compensate for the loss of desert wash habitat.

> *Recommendation:*
> Consider whether opportunities are available to restore or enhance other lands within the Chuckwalla Valley watershed to replace desert wash functions lost on the project site.

A010-14

Fencing

The DEIS does not provide information about fencing nor the effects of fencing on drainage systems. By entraining debris and sediment, fencing can interfere with natural flow patterns. Fence design should address hydrologic criteria, as well as security performance criteria.

> *Recommendations:*
> Describe, in the FEIS where permanent fencing will be used and the potential effects of fencing on drainage systems. Ensure that the fencing proposed for this project will meet appropriate hydrologic performance standards.
>
> Review the National Park Service's published article[2] on the effects of the international boundary pedestrian fence on drainage systems and infrastructure, and ensure that such issues are adequately addressed with this project.

A010-15

Floodplain Hazards

Executive Order 11988 Floodplain Management requires federal agencies to avoid, to the extent possible, the long and short-term adverse impacts associated with the occupancy and modification of floodplains. According to the DEIS, the project site is located within an "Awareness Floodplain" mapped by the Department of Water Resources as part of the Awareness Floodplain Mapping project. The Preliminary Flood Plain & Hydrology Analysis prepared for the Eagle Mountain Area found 100-year storm flows would be distributed and flow depth is not expected to exceed 3 to 5 feet in the area (p. 3.20-11).

The area is also designated by FEMA as a Flood Zone D, or area with "possible but undetermined flood hazards", which means no analysis of flood hazards has been conducted (p. 3.20-11).

> *Recommendations:*
> Describe in the FEIS, how BLM's review of the proposed project is consistent with the provisions of Executive Order 11988.
>
> Provide, in the FEIS, a detailed description of the current FEMA floodplain, and include results of consultation with FEMA, if appropriate.

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[2] National Park Service, August 2008, Effects of the International Boundary Pedestrian Fence in the Vicinity of Lukeville, Arizona, on Drainage Systems and Infrastructure, Organ Pipe Cactus National Monument, Arizona.

COMMENT SET A010, CONT.
U.S. ENVIRONMENTAL PROTECTION AGENCY

Air Quality

A010-16

EPA is concerned about the direct, indirect and cumulative impacts of construction and fugitive dust emissions associated with the project, even after mitigation measures have been taken into account. The DEIS includes estimated emissions for criteria pollutants and description of the mitigation measures that will be implemented to reduce the adverse air impacts identified in the DEIS; however, even with implementation of these mitigation measures, maximum daily construction emissions are predicted to exceed South Coast Air Quality Management District's thresholds of significance in 2012 thru 2014 for volatile organic compounds (VOCs), oxides of nitrogen (NO_x), carbon monoxide, and particulate matter 10 microns or less in size (PM_{10}) (p. 2-13 & 4.2-5).

According to the DEIS, while the area is in attainment for federal National Ambient Air Quality Standards, the project area is in nonattainment for state ozone and PM_{10} standards (p. 3.2-12). In light of the nonattainment status, the 4,400 truck trips and 82 construction vehicles expected during the 24 month construction phase, the close proximity of a federal Class I area, and the numerous projects proposed in the area, all feasible measures should be implemented to reduce and mitigate air quality impacts to the greatest extent possible.

Recommendations:

Ensure that mitigation measures in the DEIS, and additional mitigation measures that go beyond those in the DEIS (see recommendations, below), are implemented on a schedule that will reduce construction emissions to the maximum extent feasible.

Include, in the FEIS and ROD, all mitigation measures proposed in the DEIS and any additional measures adopted.

Describe, in the FEIS, how these mitigation measures will be made an enforceable part of the project's implementation schedule. We recommend implementation of applicable mitigation measures prior to or, at a minimum, concurrent with the commencement of construction of the project.

Evaluate, in the FEIS, the benefits of maximizing natural vegetation under the higher PV panel Alternative 7 in reducing fugitive dust.

Discuss, and consider adopting in the ROD, a requirement to use the local distribution line to power construction activities, rather than the five mobile generators, described on page 2-15, which would produce their own emissions.

Additional mitigation for non-road and on-road engines

EPA commends BLM for incorporating SCAQMD's Rule 403 to ensure best available and enhanced dust control measures that will limit impacts from PM_{10}. We also note MM AIR-2 recommends Tier 3 engines, if available (p. 4.2-9). EPA supports incorporating mitigation strategies to reduce or minimize fugitive dust emissions, as well as more stringent emission controls for PM and ozone precursors for construction-related activity. We also advocate minimizing disturbance to the natural landscape as much as possible, so that the need for measures to reduce fugitive is minimized or eliminated.

We recommend that the applicant and BLM commit to implementing best available emission control technologies for construction, ahead of the California Air Resources Board's in-use off-road diesel

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A010-16

vehicle regulations, regardless of fleet size.[3] EPA began phasing-in Tier 4 standards for non-road engines in 2008[4]; however, the DEIS does not mention the availability of Tier 4 non-road engines. The use of such engines would result in an approximately 90% reduction in NO_x and PM emissions as compared to Tier 3.

Recommendations:
The FEIS should discuss, and include emission tables for, various classifications of on-road and non-road engines, highlighting emission levels for PM_{10}, $PM_{2.5}$ and NO_x.

The FEIS should indicate the expected availability of Tier 3 and Tier 4 engines for the construction equipment list provided on page 2-13.

The FEIS and ROD should commit to using non-road construction equipment that meets Tier 4 emission standards, when available, and best available emission control technology, for construction that occurs prior to Tier 4 standards availability.

The FEIS should update the tables in the Section 4.2 impact analysis to reflect the additional criteria pollutant emissions reductions that would result from using Tier 4 engines for each component of project construction.

All applicable state and local requirements, and the additional and/or revised measures listed below, should be included in the FEIS, and the FEIS and ROD should include a condition that the applicant incorporate the following measures into construction contracts:

Mobile Source Controls:
- Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications.
- Prohibit any tampering with engines and require continuing adherence to manufacturer's recommendations.

Administrative controls:
- Identify where implementation of mitigation measures is rejected based on economic infeasibility.
- Prepare an inventory of all equipment prior to construction, and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking.[5] Where appropriate, use alternative fuels.
- Develop a construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow in coordination with the Desert Sunlight project.

Cumulative Air Quality Analysis

A010-17

Analyses conducted for the Desert Sunlight Solar Farm showed exceedances of SCAQMD's daily thresholds of significance for VOCs, NO_x, CO, PM_{10} and $PM_{2.5}$. Analysis of the nearby Eagle Mountain

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[3] See CARB's Factsheet at: http://www.arb.ca.gov/msprog/ordiesel/faq/overview_fact_sheet_dec_2010-final.pdf
[4] See EPA website: http://www.epa.gov/nonroad-diesel/2004fr/420f04032.htm#standards
[5] Suitability of control devices is based on: whether there is reduced normal availability of the construction equipment due to increased downtime and/or power output, whether there may be significant damage caused to the construction equipment engine, or whether there may be a significant risk to nearby workers or the public.

COMMENT SET A010, CONT.
U.S. ENVIRONMENTAL PROTECTION AGENCY

Pumped Storage Project also indicated unavoidable adverse NO$_x$ impacts (p.4.2-24). Construction of these projects, as well as seven other foreseeable projects, could overlap with construction of the proposed project; however, the DEIS does not analyze the combined emissions that would result. The DEIS concludes the project would have temporary significant and unavoidable NO$_x$ and PM$_{10}$ impacts during construction (p. 4.2-26).

A010-17 cont.

Recommendations:
Estimate, in the FEIS, the cumulative emissions from the proposed project combined with the present and reasonably foreseeable projects highlighted in Table 4.2-9. We recommend that theses cumulative emissions data be used to develop, in consultation with the SCAQMD, a phased construction schedule, for projects that will undergo construction concurrently that will not result in any violations of local, state or federal air quality regulations. EPA recommends incremental construction on-site to ensure air quality standards are not exceeded.

The FEIS should provide technical justification for any determination that a projects is too far from the proposed project to contribute to cumulative air quality impacts. While the DEIS states that a cumulative air quality analysis should be limited to an area within six miles of a project, th appropriate area to consider depends on the emissions, size of the source, and release height, among other criteria.

If additional mitigation measures would be needed, based on the evaluation of cumulative emissions, or if the project would affect the ability of other foreseeable projects to be permitted, the FEIS should discuss this.

Greenhouse Gas Emissions - Construction and Operation Bid Specifications

A010-18

In soliciting future contracts for project construction and operations, consider including in the FEIS, and adopting in the ROD, the following additional requirements:

a) Soliciting bids that include use of energy- and fuel-efficient fleets;
b) Requiring that contractors ensure, to the extent possible, that construction activities utilize grid-based electricity and/or onsite renewable electricity generation rather than diesel and/or gasoline powered generators;
c) Employing the use of zero emission or alternative fueled vehicles;
d) Using lighting systems that are energy efficient, such as LED technology;
e) Using the minimum amount of GHG-emitting construction materials that is feasible;
f) Using cement blended with the maximum feasible amount of fly ash or other supplemental cementitious materials that reduce GHG emissions from cement production;
g) Using lighter-colored pavement where feasible; and,
h) Recycling construction debris to maximum extent feasible.

Biological Resources

A010-19

Endangered Species and Other Species of Concern

The site supports a diversity of mammals, birds, and reptiles, including special status wildlife species. Project construction would result in permanent and long-term impacts to 1,206 acres including direct impacts to special status animal species through the removal of native vegetation that provides cover, foraging, and breeding habitat for wildlife (p. 4.4-5). Long-term impacts may occur as a result of increased predation and habitat fragmentation. In addition to desert tortoise, the project site provides

COMMENT SET A010, CONT.
U.S. ENVIRONMENTAL PROTECTION AGENCY

suitable habitat for burring owls and Nelson's Bighorn Sheep, as well as foraging habitat for the golden eagle (pgs. 3.4-29 & 4.4-12). The project site is located within 10 miles of known golden eagle nesting territories. A010-19

We understand that the Biological Opinion for this project has not yet been finalized. The Biological Opinion will play an important role in informing the decision on which alternative to approve and what commitments, terms, and conditions must accompany that approval.

Recommendations:
The FEIS should provide an update on the consultation process and include the Biological Opinion as an appendix.

Mitigation and monitoring measures that result from consultation with USFWS to protect sensitive biological resources, including desert tortoise, burrowing owl, golden eagles and Nelson's big horn sheep should be included in the FEIS and, ultimately, the ROD.

Explain, and correct as necessary, how the reduced footprint Alternatives 6 and 7 differ in their impacts to the Palen-Ford Wildlife Habitat Management Area in Table 4.4-1.

Identify specific measures to reduce impacts to eagles. Specify in the FEIS how approval of the proposed project would comply with the Migratory Bird Treaty Act, and the Bald and Golden Eagle Protection Act.

Discuss the applicability of the recent Eagle Conservation Plan Guidelines[6] to the proposed project and, as necessary, describe compensatory mitigation to reduce the effect of permitted mortality to a no-net-loss standard.

Include, in the FEIS, design practices to be followed for the above ground power lines to minimize bird collisions. A useful reference for this is the Avian Power Line Interaction Committee document, *Mitigating Bird Collisions with Power Lines: The State of the Art in 1994*.

Include in the FEIS a requirement for the Avian Protection Plan (now called Bird and Bat Conservation Strategies (BBCS)) to be developed using the 2005 Avian Power Line Interaction Committee and U.S. Fish and Wildlife Service Avian Protection Plan Guidelines. Include, in the FEIS, practices that reduce the potential for raptor fatalities and injuries from power lines. These practices can be found in the Suggested Practices for Avian Protection on Power Lines: State of the Art in 2006 manual.

Habitat Connectivity A010-20

The upper Chuckwalla Valley is considered an important habitat linkage, characterized by diffuse gene flow between the Mojave and Colorado portions of the desert tortoise's range. There are only a few such linkage areas providing connectivity among desert tortoise populations within conservation areas (p. 4.4-17). The project's impacts on wildlife movement and biological connectivity within the upper Chuckwalla Valley could affect biological resources within the Joshua Tree National Park (p.4.4-17). While the DEIS acknowledges that residual cumulative effects to habitat connectivity within the upper Chuckwalla Valley would be substantial due to the loss of wildlife movement habitat, the DEIS concludes

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[6] See Draft Eagle Conservation Plan Guidelines, February 2011: See internet address: http://www.fws.gov/windenergy/eagle_guidance.html

COMMENT SET A010, CONT.
U.S. ENVIRONMENTAL PROTECTION AGENCY

that, since the site is modeled as low habitat value, had low density of tortoises, and would not interfere with the most important desert tortoise movement habitat, the impacts from the proposed project would be relatively minor (p. 4.4-63). A010-20 cont.

Recommendations:
Reconsider, in the FEIS, not extending the eastern boundary of the site beyond the eastern boundary of the Desert Sunlight Solar Farm to improve habitat connectivity consistent with USFWS' suggested "Alternative to Facilitate Wildlife Movement" (p. 2-68).

Confirm, in the FEIS, based on consultation with the USFWS, that the wildlife movement and habitat connectivity impacts from the proposed project would be "relatively minor".

Discuss, in the FEIS, potential impacts to wildlife movement in the area under future climate change scenarios.

Review University of California, Riverside's recently published article[7] on the sensitivity to climate change of the desert tortoise in the area of Joshua Tree National Park. Discuss the applicability of such research and modeling in the vicinity of the project, and how such issues will be addressed with this project.

Compensatory Mitigation

A010-21

We note that mitigation measure MM VEG-6 provides an extensive protocol to ensure adequate compensatory mitigation and requires protection of compensatory lands 'into perpetuity'; however, the DEIS states that specific compensation land availability cannot be identified or quantified at this time and acquisition 'may be challenging' (p. 4.4-10). In light of the numerous renewable energy projects in the Riverside East Solar Energy Study Zone area, the availability of land to adequately compensate for environmental impacts to resources such as state jurisdictional waters, desert dry wash woodlands, and desert tortoise, may serve as a limiting factor for development.

Recommendations:
Identify compensatory mitigation lands or quantify, in the FEIS, available lands for compensatory habitat mitigation for this project, as well as reasonably foreseeable projects in the Riverside East Solar Energy Study Zone. Demonstrate that sufficient lands are available to meet the compensation land selection criteria outlined on page 4.3-22.

Clarify the rationale for the 1:1 mitigation ratio for desert tortoise habitat and how this relates to the mitigation ratios recommended by other agencies and to the higher mitigation ratios used for other renewable energy projects in California and Nevada.

Specify provisions to be adopted in the ROD that set out a clear timetable for ensuring adequate compensatory mitigation has been identified, approved and purchased, as appropriate.

The FEIS and ROD should discuss mechanisms and incorporate proposed conditions for certification that would: 1) protect into perpetuity any compensatory lands that are selected, and 2) as was agreed upon for the Desert Sunlight Solar Farm, exclude the non-developed portion of the subject ROW from further disturbance or development, based on this project's resource

---

[7] Barrows, C.W., 2011. Sensitivity to climate change for two reptiles at the Mojave-Sonoran Desert interface. Journal of Arid Environments 75, 629-635.

COMMENT SET A010, CONT.
U.S. ENVIRONMENTAL PROTECTION AGENCY

analyses and the decision to select the proposed project's footprint to minimize environmental impacts. A010-21

Climate Change

A010-22

EPA commends the BLM for including estimates of greenhouse gas emissions from construction and operation of the project. The DEIS, however, does not include a discussion of the potential impacts of climate change on the project.

Recommendation:
Considering that the project is planned to be in operation for 30, and possibly as many as 50 years, the FEIS should include a description of how climate change may affect the project. Include, in the FEIS, information detailing the impacts that climate change may have on the project, particularly its sources of groundwater, and reclamation and restoration efforts after construction and decommissioning. The FEIS should also discuss how climate change may affect the project's impacts on sensitive species.

Consistency with the California Desert Renewable Energy Conservation Plan and the Solar PEIS

A010-23

The California DRECP, scheduled for completion in 2013, is intended to advance state and federal conservation goals in the desert regions while also facilitating the timely permitting of renewable energy projects in California. The DRECP will include a strategy that identifies and maps areas for renewable energy development and areas for long-term natural resource conservation. The Solar Programmatic EIS, scheduled for completion later this Fall, is being developed by the Department of Energy and the BLM and is intended to apply to all pending and future solar energy development right of way applications. The Desert Harvest project is located in the DRECP boundary area and, potentially, in the Riverside East Solar Energy Zone identified in the PEIS.

Recommendation:
The FEIS should elaborate on the DRECP and Solar PEIS, and include up-to-date maps illustrating the current boundaries and conceptual alternatives that are relevant to the proposed project. Discuss whether the site is expected to be included within the Riverside East Solar Energy Zone and acknowledge that additional requirements and/or conditions may apply upon approval of the DRECP and/or the Solar PEIS.

Cultural Resources and Consultation with Tribal Governments

A010-24

A total of 34 cultural resources have been inventoried to date for the project, including six prehistoric resources and 18 historic resources (p. 3.6-29). The DEIS states that BLM has formally invited 15 Native American Tribes to consult at the government-to-government level throughout the review of the project (p. 5-6).

While we commend BLM for initiating consultation in the Fall of 2011, the DEIS indicates that it is unknown at this time if impacts on cultural resources as a result of the construction of the solar farm can be satisfactorily mitigated, primarily because identification efforts have not been completed for this project (p. 4.6-10). Further, National Register of Historic Places eligibility determinations and findings of effect are still pending and the indirect effects studies are not complete (p. 4.6-4)

10

COMMENT SET A010, CONT.
U.S. ENVIRONMENTAL PROTECTION AGENCY

Consultation with Indian Tribes, and discussions with Tribal organizations and individuals, have revealed concern about the importance and sensitivity of cultural resources near the project site, as well as cumulative effects to cultural resources and landscapes (p. 5-6). A010-24 cont.

Recommendations:
Describe, in the FEIS, the process and outcome of government-to-government consultation between the BLM and the tribal governments listed on page 5-7.

Discuss issues that were raised, how those issues were addressed in relation to the proposed project, and how impacts to tribal or cultural resources will be avoided or mitigated consistent with Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments*, Section 106 of the National Historic Preservation Act, and Executive Order 13007, *Indian Sacred Sites.*

Include, in the FEIS, the NRHP eligibility determinations and the results of the indirect effects studies.

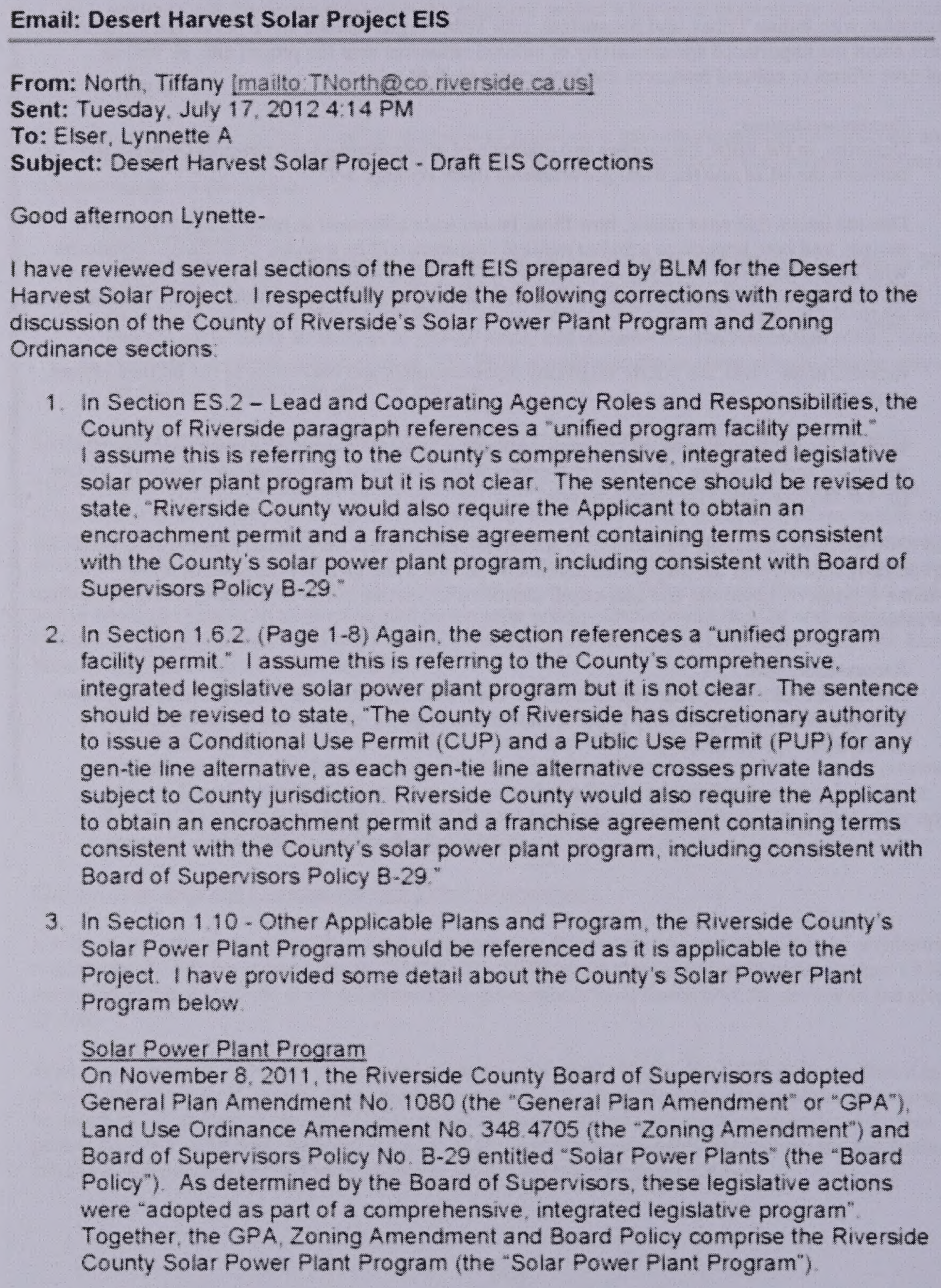
Update the Cultural Resources chapter to reflect the above recommendations related to tribal resources and revise the "*The Desert Harvest Solar Project in the Cumulative Context*" section (p. 4.6-26) to account for tribal concerns.

Please note, we have identified, and copied, 9 additional tribes on our comments. These tribes, while not geographically located near the project, are affiliated with the tribal groups (Cahuilla, Serrano, Chemehuevi, Mojave, Quechan, and Maricopa) identified in Section 3.6 as historically living in the area of the project. A010-25

Recommendation:
Contact the additional tribal representatives copied on this comment letter to ensure they have been provided the opportunity to participate in the ongoing government-to-government consultation for the project.

11

COMMENT SET A011
OFFICE OF RIVERSIDE COUNTY COUNSEL



Email: Desert Harvest Solar Project EIS

From: North, Tiffany [mailto:TNorth@co.riverside.ca.us]
Sent: Tuesday, July 17, 2012 4:14 PM
To: Elser, Lynnette A
Subject: Desert Harvest Solar Project - Draft EIS Corrections

Good afternoon Lynette-

A011-1 I have reviewed several sections of the Draft EIS prepared by BLM for the Desert Harvest Solar Project. I respectfully provide the following corrections with regard to the discussion of the County of Riverside's Solar Power Plant Program and Zoning Ordinance sections:

1. In Section ES.2 – Lead and Cooperating Agency Roles and Responsibilities, the County of Riverside paragraph references a "unified program facility permit." I assume this is referring to the County's comprehensive, integrated legislative solar power plant program but it is not clear. The sentence should be revised to state, "Riverside County would also require the Applicant to obtain an encroachment permit and a franchise agreement containing terms consistent with the County's solar power plant program, including consistent with Board of Supervisors Policy B-29."
2. In Section 1.6.2. (Page 1-8) Again, the section references a "unified program facility permit." I assume this is referring to the County's comprehensive, integrated legislative solar power plant program but it is not clear. The sentence should be revised to state, "The County of Riverside has discretionary authority to issue a Conditional Use Permit (CUP) and a Public Use Permit (PUP) for any gen-tie line alternative, as each gen-tie line alternative crosses private lands subject to County jurisdiction. Riverside County would also require the Applicant to obtain an encroachment permit and a franchise agreement containing terms consistent with the County's solar power plant program, including consistent with Board of Supervisors Policy B-29." A011-2
3. In Section 1.10 - Other Applicable Plans and Program, the Riverside County's Solar Power Plant Program should be referenced as it is applicable to the Project. I have provided some detail about the County's Solar Power Plant Program below. A011-3

   Solar Power Plant Program
   On November 8, 2011, the Riverside County Board of Supervisors adopted General Plan Amendment No. 1080 (the "General Plan Amendment" or "GPA"), Land Use Ordinance Amendment No. 348.4705 (the "Zoning Amendment") and Board of Supervisors Policy No. B-29 entitled "Solar Power Plants" (the "Board Policy"). As determined by the Board of Supervisors, these legislative actions were "adopted as part of a comprehensive, integrated legislative program". Together, the GPA, Zoning Amendment and Board Policy comprise the Riverside County Solar Power Plant Program (the "Solar Power Plant Program").

COMMENT SET A011, CONT.
OFFICE OF RIVERSIDE COUNTY COUNSEL

A011-3 cont.

The General Plan Amendment directly addresses solar power plants in the General Plan for the first time by adding a new countywide land use element policy, which provides:

"LU 15.15. Permit and encourage, in an environmentally and fiscally responsible manner, the development of renewable energy resources and related infrastructure, including but not limited to, the development of solar power plants in the County of Riverside."

The Zoning Amendment defines "solar power plants" and authorizes solar power plants as conditionally permitted uses with approval of a conditional use permit on lots 10 acres or larger in 19 different zoning classifications, including the W-2, A-1,and N-A zones applicable to the Project. Before adoption of the Zoning Amendment, solar power plants were not a permitted or conditionally permitted use anywhere in the unincorporated area of the County, and were prohibited under Ordinance No. 348, the County Land Use Ordinance.

The Board Policy addresses several issues regarding the development of solar power plants. It provides for payments by solar power plant owners in three different circumstances:

- Where the solar power plant project involves the use of County property.
- Where the solar power plant project involves the use of County roads or other County right of way.
- Where the solar power plant project involves a conditional use permit or other land use approval and a development agreement.

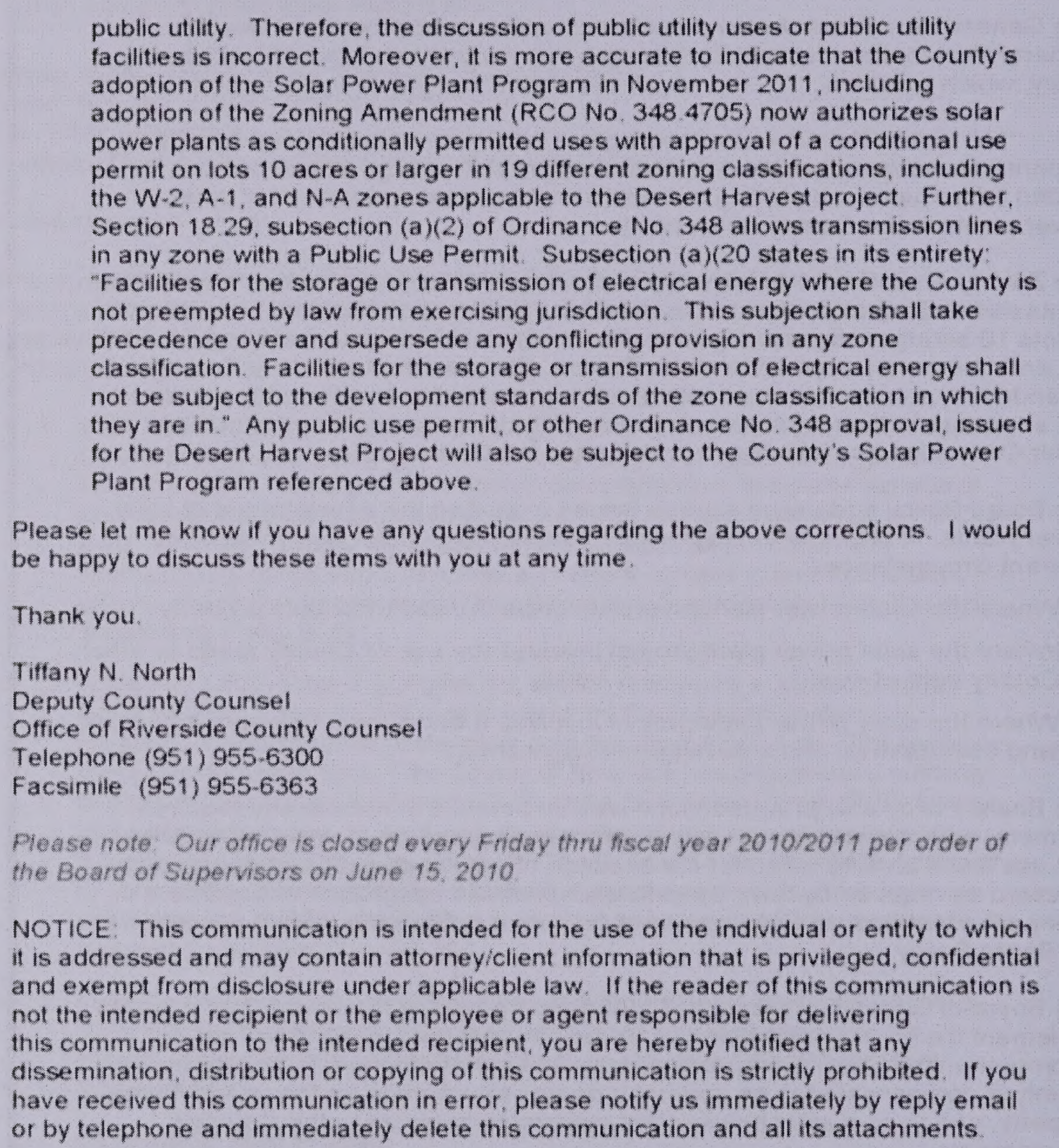
The Board Policy also provides incentives and credits to reduce any required payment, and provides for security or other arrangements to ensure that sales and use taxes lawfully owed for construction of a solar power plant are paid and allocated as required by law. Specific exceptions to application of the Board Policy are identified, and any applicant is given a right to request an exception to the Board Policy.

The Board of Supervisors identified that the purposes of the Board Policy "are to implement the . . . General Plan . . . , to ensure that the County does not disproportionately bear the burden of solar energy production, to ensure the County is compensated in an amount it deems appropriate for the use of its real property, and to give solar power plant owners certainty as to the County's requirements."

A011-4

In Chapter 4, Section 4.11 - Lands and Realty, I note that several of the proposed alternatives mention "utility" uses as being permitted in the applicable zones, either with a plot plan or conditional use permit. The actual text of these sections of Ordinance No. 348 (the County's zoning ordinance) refer to "public utilities," not just "utilities." For example, the Alternative B discussion in the Draft EIS references the N-A zone. The actual N-A zone text of Ordinance No. 348 includes "public utility substations," not just "utility substations." enXco is not a

COMMENT SET A011, CONT.
OFFICE OF RIVERSIDE COUNTY COUNSEL



A011-4 c

public utility. Therefore, the discussion of public utility uses or public utility facilities is incorrect. Moreover, it is more accurate to indicate that the County's adoption of the Solar Power Plant Program in November 2011, including adoption of the Zoning Amendment (RCO No. 348.4705) now authorizes solar power plants as conditionally permitted uses with approval of a conditional use permit on lots 10 acres or larger in 19 different zoning classifications, including the W-2, A-1, and N-A zones applicable to the Desert Harvest project. Further, Section 18.29, subsection (a)(2) of Ordinance No. 348 allows transmission lines in any zone with a Public Use Permit. Subsection (a)(20 states in its entirety: "Facilities for the storage or transmission of electrical energy where the County is not preempted by law from exercising jurisdiction. This subjection shall take precedence over and supersede any conflicting provision in any zone classification. Facilities for the storage or transmission of electrical energy shall not be subject to the development standards of the zone classification in which they are in." Any public use permit, or other Ordinance No. 348 approval, issued for the Desert Harvest Project will also be subject to the County's Solar Power Plant Program referenced above.

A011-5

Please let me know if you have any questions regarding the above corrections. I would be happy to discuss these items with you at any time.

Thank you.

Tiffany N. North
Deputy County Counsel
Office of Riverside County Counsel
Telephone (951) 955-6300
Facsimile (951) 955-6363

Please note: Our office is closed every Friday thru fiscal year 2010/2011 per order of the Board of Supervisors on June 15, 2010.

NOTICE: This communication is intended for the use of the individual or entity to which it is addressed and may contain attorney/client information that is privileged, confidential and exempt from disclosure under applicable law. If the reader of this communication is not the intended recipient or the employee or agent responsible for delivering this communication to the intended recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by reply email or by telephone and immediately delete this communication and all its attachments.

COMMENT SET A012
CALIFORNIA DEPARTMENT OF FISH AND GAME

State of California -The Natural Resources Agency
DEPARTMENT OF FISH AND GAME
3602 Inland Empire Boulevard, Suite C-220
Ontario, CA 91764
(909) 484-0459
http://www.dfg.ca.gov

EDMUND G. BROWN JR., Governor
CHARLTON H. BONHAM, Director

July 13, 2012

Ms. Lynnette Elser, Project Manager
California Desert District Office
Bureau of Land Management
22835 Calle San Juan De Los Lagos
Moreno Valley, CA92553

A012-1

Subject: Comments on the Draft Environmental Impact Statement and Draft Plan Amendment for the Desert Harvest Solar Project, Riverside County, California

Dear Ms. Elser:

The California Department of Fish and Game (DFG) would like to thank you for the opportunity to review the above-referenced Draft Environmental Impact Statement (DEIS) and Draft Plan Amendment (DPA), dated April 2012, for the proposed Desert Harvest Solar Project (Project). DFG is a trustee agency under the California Environmental Quality Act (CEQA Guidelines Section 15386) and is responsible for ensuring appropriate conservation of fish and wildlife resources including rare, threatened, and endangered plant and animal species, pursuant to the California Endangered Species Act (CESA). DFG also acts as a Responsible Agency regarding any discretionary actions (CEQA Guidelines Section 15381), such as the issuance of a Lake or Streambed Alteration Agreement [Fish and Game Code Sections 1600 et seq.] and/or a Permit for Incidental Take of Endangered, Threatened, and/or Candidate species [Fish and Game Code Sections 2080 and 2080.1].

The proposed project is located north of the unincorporated community of Desert Center, in Riverside County, California. The DEIS/DPA analyzes the impacts of enXco Development Corporation's (Applicant) Desert Harvest Solar Project (DHSP). An application for this project was filed with the BLM for a right-of-way (ROW) authorization to construct, operate, maintain, and decommission a 1,208-acre, 150-megawatt (MW) solar energy project and 220-kilovolt (kV) generation-intertie transmission line (gen-tie line). The application also proposes to amend the California Desert Conservation Area (CDCA) Plan (BLM 1980), as amended (CDCA Plan) to find the site suitable for solar electricity generation and to allow a high-voltage transmission line outside of a federally designated utility corridor.

The proposed solar facility would consist of a main generation area which would include photovoltaic (PV) arrays, a switchyard, inverters, overhead lines, and access corridors. The solar facility would also include an operation and maintenance facility, an on-site substation and switchgear. Site security, fencing, and lighting will protect the facility. The proposed 220-kV generation-tie (gen-tie) line would transmit the electricity generated to the regional transmission

Conserving California's Wildlife Since 1870

COMMENT SET A012, CONT.
CALIFORNIA DEPARTMENT OF FISH AND GAME

Draft Environmental Impact Statement and Draft Plan Amendment for the Desert Harvest Solar Project County of Riverside,
Page 2 of 4

A012-1 co

system through the Red Bluff Substation, where the power from the proposed solar facility would be stepped up and fed into Southern California Edison's existing Devers Palo Verde No. 1 high-voltage transmission line. The solar facility alternatives would be located exclusively on BLM-administered land. The gen-tie alternatives would occur on a combination of BLM-administered land, land owned by the Metropolitan Water District of Southern California, land owned by Riverside County, and private land.

Based on the review of the DEIS/DPA, DFG is making the following preliminary recommendations to the Lead Agency:

1. The western Chuckwalla Valley, including the proposed right-of-way, is a critical linkage area for desert tortoise between populations in the Mojave and Colorado/Sonoran deserts for numerous species. It is one of the few areas between northern and southern populations where topographic and climatic features minimally constrain desert tortoise habitat suitability. The area between Kaiser Road and Eagle Mountain Road supports some of the highest densities of desert tortoises. The vicinity of the proposed project, particularly the area west of Kaiser Road, is important for tortoise connectivity. Analyze the impacts that this project will have on connectivity to the desert tortoise and how this impact will be minimized or mitigated.

2. DFG does not recommend placing animals in holding facilities except under rare and project specific conditions. Please clarify under what conditions the applicant would consider this method instead of translocation of tortoises to a recipient site. A012-2

3. Project activities outside of tortoise exclusion fencing only occur when a Biological Monitor is on site and monitoring activities. A012-3

4. To minimize the risk of wildlife jumping over desert tortoise exclusion fencing (or burrowing under security fencing) require security fencing be installed contiguous to permanent desert tortoise exclusion fencing A012-4

5. Please follow the new DFG staff report on burrowing owl mitigation (2012) to describe the habitat compensation for burrowing owls. A012-5

6. Implement phased grading (grading only portions of the project site scheduled for immediate construction) to minimize fugitive dust. A012-6

7. Require *all* employees, contractors, and onsite personnel receive WEAP training. A012-7

8. Include weekly verbal or written updates to DFG and USFWS in the Designated Biologist's responsibilities and also develop a wok schedule indicating when the Designated Biologist is required to be on site, including a discussion of how weekly updates will be prepared without a corresponding on-site inspection. A012-8

9. Work with the developer to route high energy transmission lines (34.5 kV lines between the switchgear and substation) underground. A012-9

COMMENT SET A012, CONT.
CALIFORNIA DEPARTMENT OF FISH AND GAME

Draft Environmental Impact Statement and Draft Plan Amendment for the Desert Harvest Solar
Project County of Riverside,
Page 3 of 4

10. Require any guy wires be outfitted with bird deterrence devices in accordance with the Avian Power Line Interaction Committee guidelines. A012-10

11. Require that in the monitoring plan for reclamation, re-vegetation, or restoration of the sites continue until the defined success criteria are achieved. A012-11

12. Include the Solar Energy Development Programmatic EIS and Desert Renewable Energy Conservation Plan in the cumulative effects analysis. A012-12

13. Include the Eagle Mountain Pumped Storage Hydroelectric project in the analysis of cumulative effects. A012-13

14. Include an analysis of the wildlife mortality risk from road traffic in the discussion of project impacts. A012-14

15. Notify DFG immediately upon the discovery of injured or dead wildlife on the project site. A012-15

16. Require netting used to cover evaporation ponds be 2 centimeters square or smaller (to prevent bird entanglement) not 1.5 inches square. In addition, netting should be installed to prevent sagging, and should be a minimum of 5 feet above the water surface. A012-16

17. Please clarify what types of visual deterrents would be installed to dissuade avian use of evaporation ponds. Please specify the goals of such deterrents, and how its use supplements the exclusionary netting. A012-17

18. Require that any kit fox burrow excavation should occur only by hand, not with mechanized equipment. A012-18

19. Require that the vegetation restoration plan include a discussion on seed collection and preservation. A012-19

20. Require the DEIS/DPA include an analysis of the project's potential impact on hunting opportunities for game species within and surrounding the project. A12-20

DFG appreciates the importance of renewable energy development, and would like to thank you and other agencies for the opportunities for collaboration and feedback. If you have any questions regarding this letter please contact Dr. Shankar Sharma at ssharma@dfg.ca.gov or 909-987-8397.

Sincerely,

Magdalena Rodriguez

Magdalena Rodriguez

COMMENT SET A012, CONT.
CALIFORNIA DEPARTMENT OF FISH AND GAME

Draft Environmental Impact Statement and Draft Plan Amendment for the Desert Harvest Solar Project County of Riverside,
Page 4 of 4

CC:

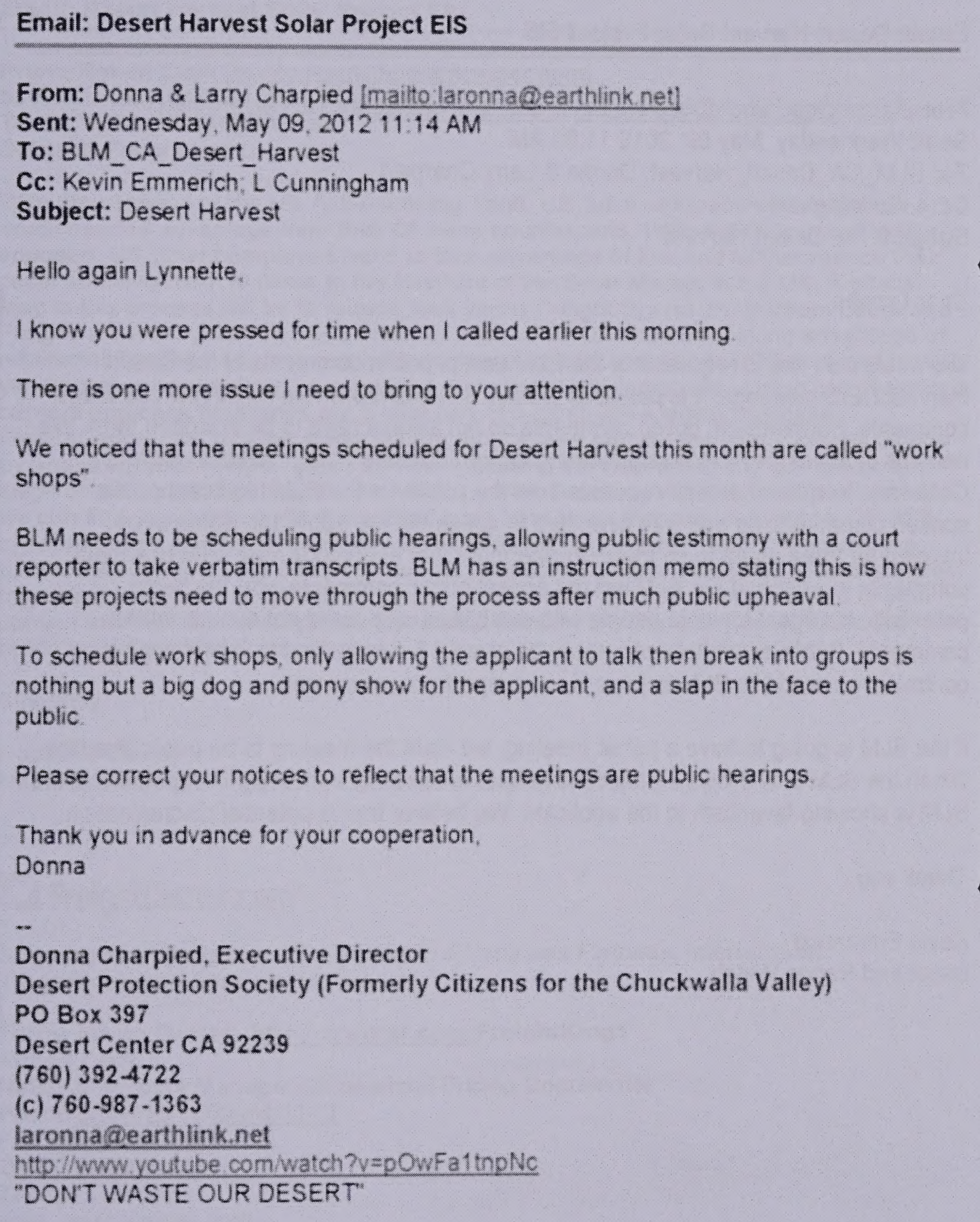
Nisa Marks, Biologist
US Fish and Wildlife Service
Palm Springs Fish and Wildlife Office
777 E. Tahquitz Canyon Way, Suite 208
Palm Springs, CA 92262

EC:

David Elms
Regional Deputy Manager
Department of Fish and Game

William Condon
Environmental Program Manager
Department of Fish and Game

COMMENT SET B001
DESERT PROTECTION SOCIETY



Email: Desert Harvest Solar Project EIS

From: Donna & Larry Charpied [mailto:laronna@earthlink.net]
Sent: Wednesday, May 09, 2012 11:14 AM
To: BLM_CA_Desert_Harvest
Cc: Kevin Emmerich; L Cunningham
Subject: Desert Harvest

B001-1

Hello again Lynnette,

I know you were pressed for time when I called earlier this morning.

There is one more issue I need to bring to your attention.

We noticed that the meetings scheduled for Desert Harvest this month are called "work shops".

BLM needs to be scheduling public hearings, allowing public testimony with a court reporter to take verbatim transcripts. BLM has an instruction memo stating this is how these projects need to move through the process after much public upheaval.

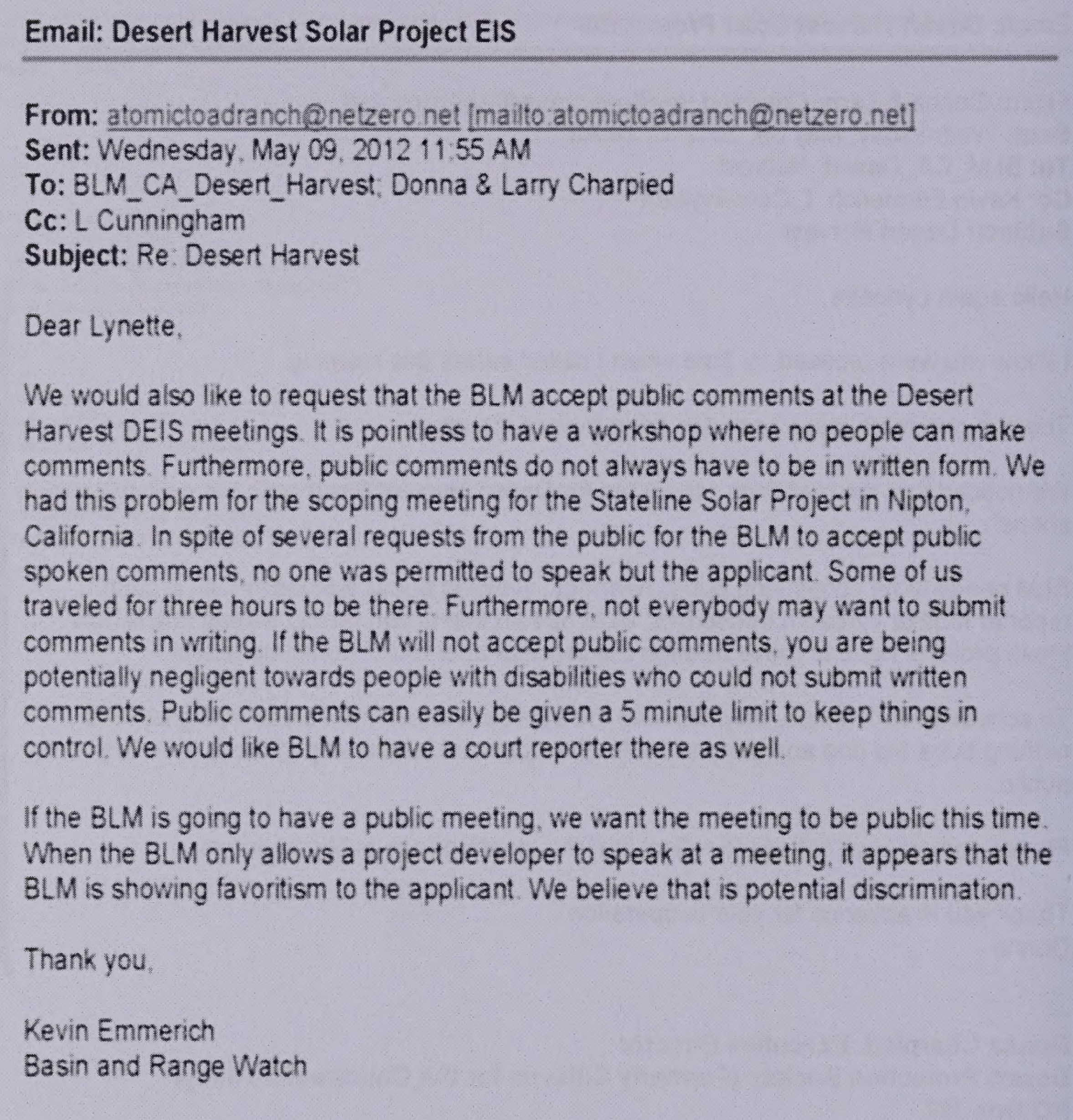
To schedule work shops, only allowing the applicant to talk then break into groups is nothing but a big dog and pony show for the applicant, and a slap in the face to the public.

Please correct your notices to reflect that the meetings are public hearings.

Thank you in advance for your cooperation,
Donna

--
Donna Charpied, Executive Director
Desert Protection Society (Formerly Citizens for the Chuckwalla Valley)
PO Box 397
Desert Center CA 92239
(760) 392-4722
(c) 760-987-1363
laronna@earthlink.net
http://www.youtube.com/watch?v=pOwFa1tnpNc
"DON'T WASTE OUR DESERT"

COMMENT SET B002
BASIN & RANGE WATCH



Email: Desert Harvest Solar Project EIS

From: atomictoadranch@netzero.net [mailto:atomictoadranch@netzero.net]
Sent: Wednesday, May 09, 2012 11:55 AM
To: BLM_CA_Desert_Harvest; Donna & Larry Charpied
Cc: L Cunningham
Subject: Re: Desert Harvest

Dear Lynette,

B002-1

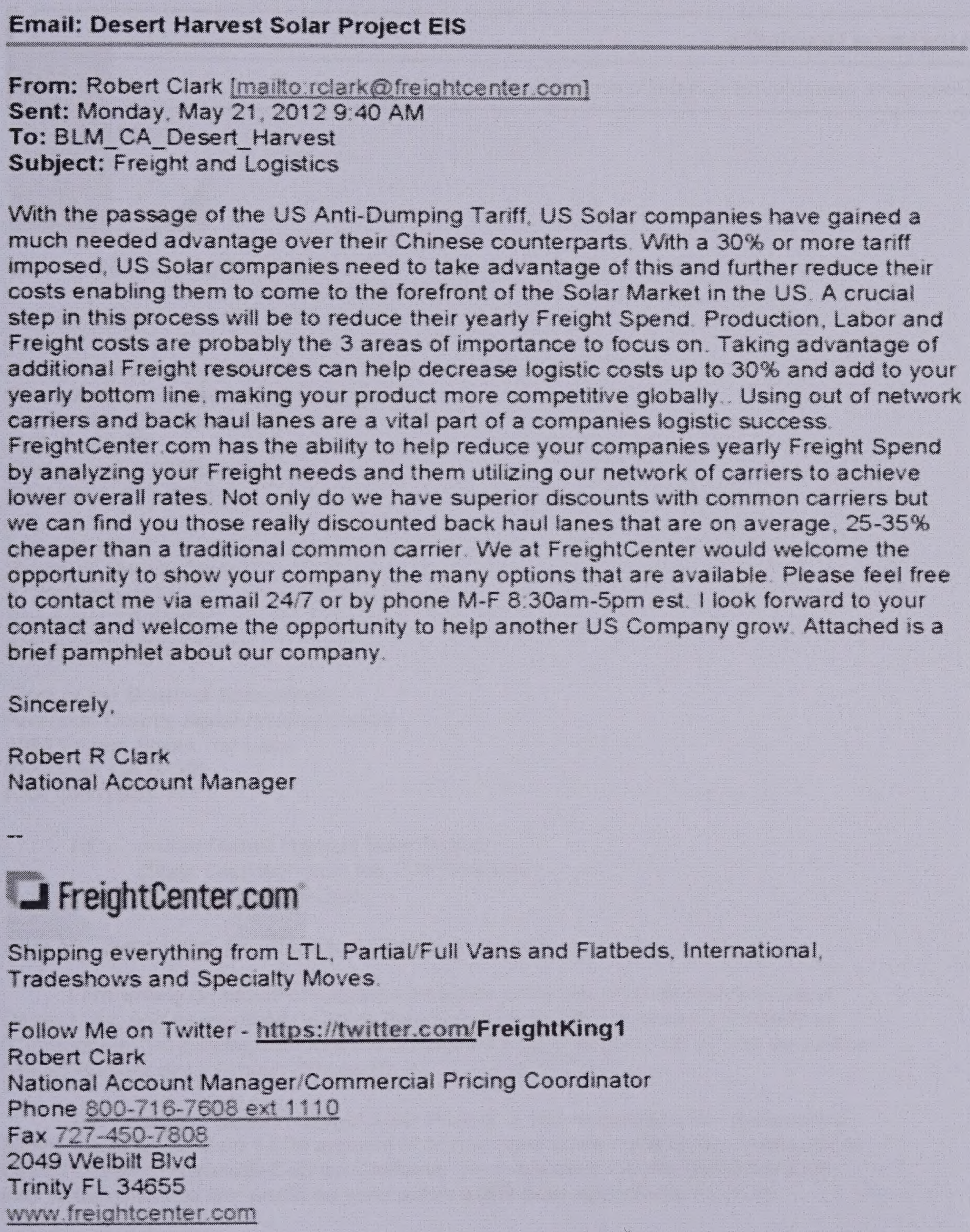
We would also like to request that the BLM accept public comments at the Desert Harvest DEIS meetings. It is pointless to have a workshop where no people can make comments. Furthermore, public comments do not always have to be in written form. We had this problem for the scoping meeting for the Stateline Solar Project in Nipton, California. In spite of several requests from the public for the BLM to accept public spoken comments, no one was permitted to speak but the applicant. Some of us traveled for three hours to be there. Furthermore, not everybody may want to submit comments in writing. If the BLM will not accept public comments, you are being potentially negligent towards people with disabilities who could not submit written comments. Public comments can easily be given a 5 minute limit to keep things in control. We would like BLM to have a court reporter there as well.

If the BLM is going to have a public meeting, we want the meeting to be public this time. When the BLM only allows a project developer to speak at a meeting, it appears that the BLM is showing favoritism to the applicant. We believe that is potential discrimination.

Thank you,

Kevin Emmerich
Basin and Range Watch

COMMENT SET B003
FREIGHTCENTER.COM



Email: Desert Harvest Solar Project EIS

From: Robert Clark [mailto:rclark@freightcenter.com]
Sent: Monday, May 21, 2012 9:40 AM
To: BLM_CA_Desert_Harvest
Subject: Freight and Logistics

With the passage of the US Anti-Dumping Tariff, US Solar companies have gained a much needed advantage over their Chinese counterparts. With a 30% or more tariff imposed, US Solar companies need to take advantage of this and further reduce their costs enabling them to come to the forefront of the Solar Market in the US. A crucial step in this process will be to reduce their yearly Freight Spend. Production, Labor and Freight costs are probably the 3 areas of importance to focus on. Taking advantage of additional Freight resources can help decrease logistic costs up to 30% and add to your yearly bottom line, making your product more competitive globally.. Using out of network carriers and back haul lanes are a vital part of a companies logistic success. FreightCenter.com has the ability to help reduce your companies yearly Freight Spend by analyzing your Freight needs and them utilizing our network of carriers to achieve lower overall rates. Not only do we have superior discounts with common carriers but we can find you those really discounted back haul lanes that are on average, 25-35% cheaper than a traditional common carrier. We at FreightCenter would welcome the opportunity to show your company the many options that are available. Please feel free to contact me via email 24/7 or by phone M-F 8:30am-5pm est. I look forward to your contact and welcome the opportunity to help another US Company grow. Attached is a brief pamphlet about our company. B003-1

Sincerely,

Robert R Clark
National Account Manager

--

FreightCenter.com

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Follow Me on Twitter - https://twitter.com/**FreightKing1**
Robert Clark
National Account Manager/Commercial Pricing Coordinator
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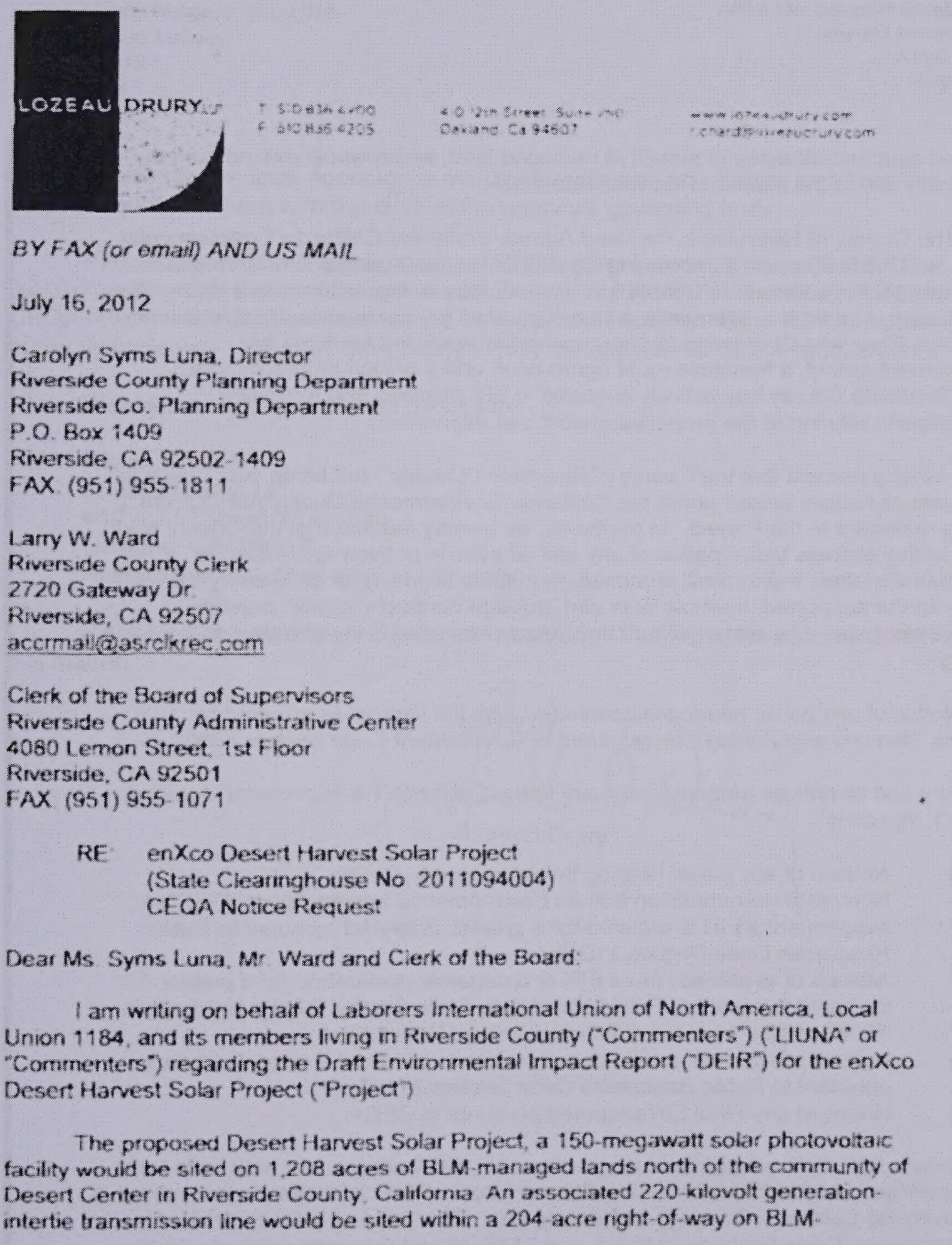
www.freightcenter.com

COMMENT SET B003, CONT.
FREIGHTCENTER.COM

Attachment Description
Descriptive pamphlet for FreightCenter.com

B003-1 Co

COMMENT SET B004
LABORERS INTERNATIONAL UNION OF NORTH AMERICA



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BY FAX (or email) AND US MAIL

July 16, 2012

Carolyn Syms Luna, Director
Riverside County Planning Department
Riverside Co. Planning Department
P.O. Box 1409
Riverside, CA 92502-1409
FAX: (951) 955-1811

Larry W. Ward
Riverside County Clerk
2720 Gateway Dr.
Riverside, CA 92507
accrmail@asrclkrec.com

Clerk of the Board of Supervisors
Riverside County Administrative Center
4080 Lemon Street, 1st Floor
Riverside, CA 92501
FAX: (951) 955-1071

RE: enXco Desert Harvest Solar Project
(State Clearinghouse No. 2011094004)
CEQA Notice Request

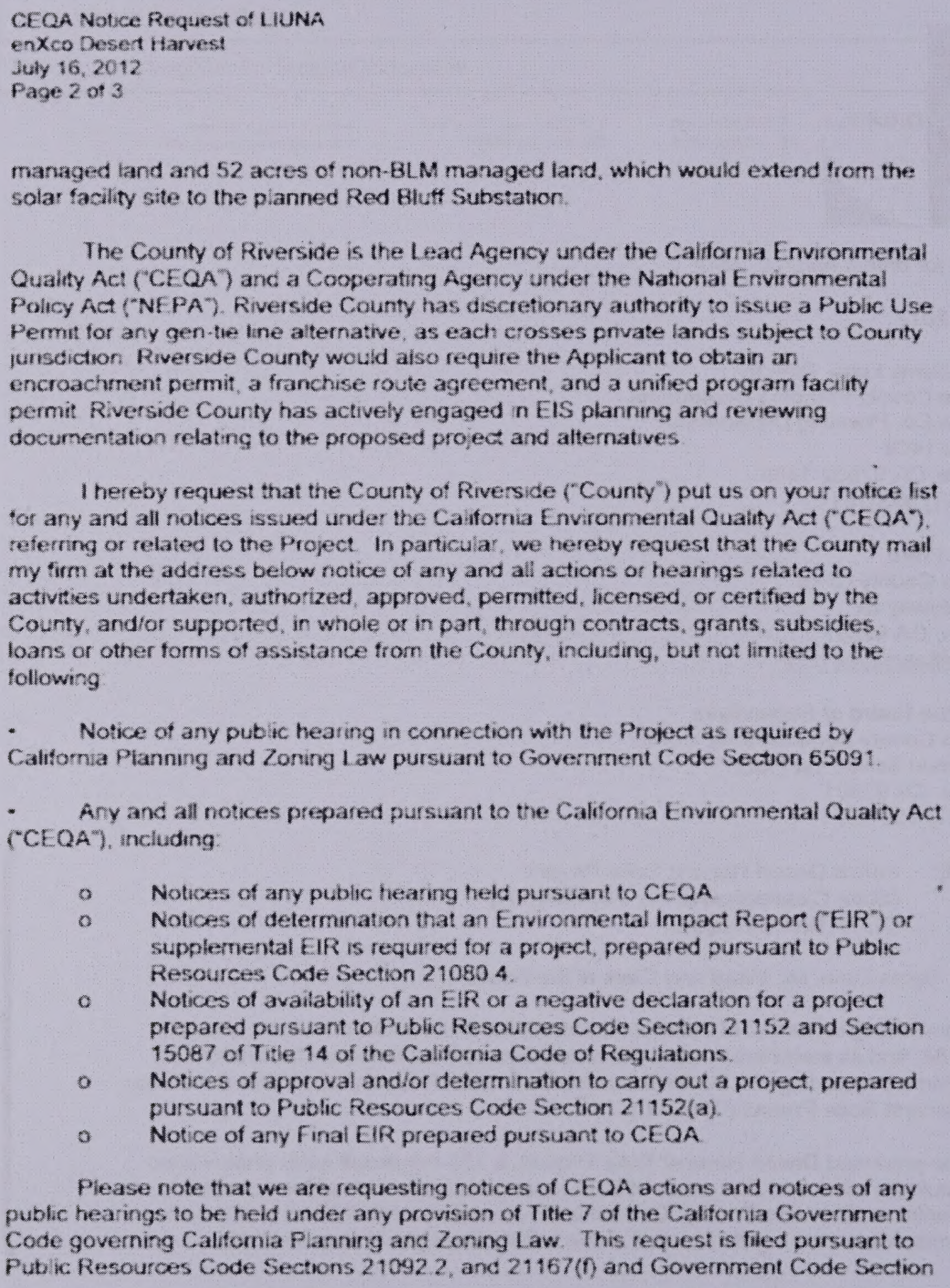
Dear Ms. Syms Luna, Mr. Ward and Clerk of the Board:

I am writing on behalf of Laborers International Union of North America, Local Union 1184, and its members living in Riverside County ("Commenters") ("LIUNA" or "Commenters") regarding the Draft Environmental Impact Report ("DEIR") for the enXco Desert Harvest Solar Project ("Project").

The proposed Desert Harvest Solar Project, a 150-megawatt solar photovoltaic facility would be sited on 1,208 acres of BLM-managed lands north of the community of Desert Center in Riverside County, California. An associated 220-kilovolt generation-intertie transmission line would be sited within a 204-acre right-of-way on BLM-

B004-1

COMMENT SET B004, CONT.
LABORERS INTERNATIONAL UNION OF NORTH AMERICA



CEQA Notice Request of LIUNA
enXco Desert Harvest
July 16, 2012
Page 2 of 3

managed land and 52 acres of non-BLM managed land, which would extend from the solar facility site to the planned Red Bluff Substation.

The County of Riverside is the Lead Agency under the California Environmental Quality Act ("CEQA") and a Cooperating Agency under the National Environmental Policy Act ("NEPA"). Riverside County has discretionary authority to issue a Public Use Permit for any gen-tie line alternative, as each crosses private lands subject to County jurisdiction. Riverside County would also require the Applicant to obtain an encroachment permit, a franchise route agreement, and a unified program facility permit. Riverside County has actively engaged in EIS planning and reviewing documentation relating to the proposed project and alternatives.

I hereby request that the County of Riverside ("County") put us on your notice list for any and all notices issued under the California Environmental Quality Act ("CEQA"), referring or related to the Project. In particular, we hereby request that the County mail my firm at the address below notice of any and all actions or hearings related to activities undertaken, authorized, approved, permitted, licensed, or certified by the County, and/or supported, in whole or in part, through contracts, grants, subsidies, loans or other forms of assistance from the County, including, but not limited to the following:

- Notice of any public hearing in connection with the Project as required by California Planning and Zoning Law pursuant to Government Code Section 65091.

- Any and all notices prepared pursuant to the California Environmental Quality Act ("CEQA"), including:
  - o Notices of any public hearing held pursuant to CEQA.
  - o Notices of determination that an Environmental Impact Report ("EIR") or supplemental EIR is required for a project, prepared pursuant to Public Resources Code Section 21080.4.
  - o Notices of availability of an EIR or a negative declaration for a project prepared pursuant to Public Resources Code Section 21152 and Section 15087 of Title 14 of the California Code of Regulations.
  - o Notices of approval and/or determination to carry out a project, prepared pursuant to Public Resources Code Section 21152(a).
  - o Notice of any Final EIR prepared pursuant to CEQA.

Please note that we are requesting notices of CEQA actions and notices of any public hearings to be held under any provision of Title 7 of the California Government Code governing California Planning and Zoning Law. This request is filed pursuant to Public Resources Code Sections 21092.2, and 21167(f) and Government Code Section

B004-1 co

COMMENT SET B004, CONT.
LABORERS INTERNATIONAL UNION OF NORTH AMERICA

65092, which require local agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency's governing body

B004-1 cont.

Please note that the requirements of CEQA differ in several respects from the requirements of the National Environmental Policy Act ("NEPA"). Therefore a separate CEQA review and comment process will be required in addition to the NEPA review currently underway. We urge the County to fully comply with all CEQA requirements.

B004-2

Please mail and fax or email notices to:

Richard Drury
Lozeau|Drury LLP
410 – 12th Street, Suite 410
Oakland, CA 94607
Richard@lozeaudrury.com

Please call me should you have any questions. Thank you for your attention to this matter.

Sincerely,

Richard Drury

COMMENT SET B005
NATIONAL PARKS CONSERVATION ASSOCIATION

NATIONAL PARKS CONSERVATION ASSOCIATION
Protecting Parks for Future Generations

July 2, 2012

Lynette Elser, Planning and Environmental Coordinator
Bureau of Land Management
22835 Calle San Juan de Los Lagos
Moreno Valley, CA 92553

Dear Ms. Elser:

The National Parks Conservation Association (NPCA), a non-profit whose mission is to "protect and enhance the national parks for present and future generations," would like to submit the following comments on enXco's Desert Harvest Solar Farm. NPCA has almost 600,000 supporters nationwide and 96,000 members and active supporters in the state of California. We work with communities, the media and elected officials to raise awareness about the value of protecting and supporting America's national parks. NPCA believes our nation must invest in a renewable energy future to become independent from foreign oil and reduce the worst impacts of climate change, but do so in such a way that does not jeopardize our national parks and other ecologically sensitive areas. B005-1

EnXco's proposed 150 Megawatt Desert Harvest Solar Farm is located in the Chuckwalla Valley of California, north of Interstate 10 and directly to the south of the approved Desert Sunlight Solar Farm. The footprint of the preferred alternative for the Desert Harvest Solar Farm is over 1000 acres and would include photovoltaic solar arrays, a substation, administration buildings, maintenance facilities and a transmission line. The project is adjacent to the Chuckwalla Desert Wildlife Management area and is approximately 2 miles from the border of Joshua Tree National Park. If approved, construction would commence in late 2013 and would take approximately 9-12 months to complete.

NPCA thanks the Bureau of Land Management for the opportunity to comment on the Desert Harvest Solar Farm Draft Environmental Impact Statement and requests that the Final EIS address the following issues:

The Final EIR must include an Economic Analysis

Joshua Tree National Park was designated a national monument on August 10, 1936 by President Franklin Delano Roosevelt and received national park status in 1994 with passage of Senator Dianne Feinstein's California Desert Protection Act. The park is an ecological gem that connects three diverse ecosystems: the Colorado Desert, the Mojave Desert and the high elevation pinon/juniper country of the Little San Bernardino Mountains. Joshua Tree also has

COMMENT SET B005, CONT.
NATIONAL PARKS CONSERVATION ASSOCIATION

superb recreational opportunities for rock climbers, hikers, equestrians, wildlife enthusiasts, stargazers and campers.

B005-1 cont.

There were 1.4 million visits to Joshua Tree National Park in 2010 and despite the worst economic times since the Great Depression, visitation to the park actually increased from 2008-2010. According to the 2010 University of Idaho Visitor Use Survey, almost 20% of the visitors to Joshua Tree are from other countries while 50% are from the state of California. These facts underscore Joshua Tree National Park's importance as an affordable local, regional, national and international travel destination.

These figures are important because they highlight the fact that the park is not only a recreational haven for outdoor enthusiasts or a nature lover's paradise, but also is a powerful economic engine. An analysis by the late Dr. Daniel Stynes, professor emeritus of the Department of Community, Agriculture, Recreation & Resources at Michigan State University, shows that the surrounding region (30 mile radius) receives total direct spending effects of $48 million, and secondary effects of $16 million, for a total effect of over $64 million.

Additionally, the 2010 University of Idaho Joshua Tree National Park Visitor Use Survey found that two of visitor's highest values or reasons for visiting Joshua Tree were its unobstructed views and its wildlife. Unobstructed views and wildlife are also the two resources that are imperiled from industrial scale solar and wind development, such as the proposed Desert Harvest Solar Farm and other renewable energy development along the park's southern boundary and I-10 corridor. If the visual and wildlife resources of Joshua Tree National Park are adversely impacted by renewable energy development, visitors to the California desert may decide to go elsewhere, harming our regional tourism economy.

Proximity to Joshua Tree National Park

B005-2

The Preferred Alternative would locate the project within 2 miles from the border of Joshua Tree National Park. NPCA cannot support this project at its current location and would encourage Enexco to seek an alternative site on disturbed land elsewhere in the California desert. NPCA does support Alternative 1- No Action or Alternative 3- No project alternative with plan to find the site unsuitable for large scale solar development

NPCA believes that if the Desert Harvest Solar Farm does move forward, the project's proximity to Joshua Tree's boundary demands a higher level of scrutiny than would normally be required for other projects in less sensitive areas. The project would have unavoidable adverse effects on air quality from emissions created during construction such as PM10, VOC, CO, and NOx. Project grading would also destroy vegetation adjacent to Joshua Tree National Park and would cause temporary disturbance and permanent loss of wildlife habitat, displacement and regional habitat fragmentation.

Desert Harvest would also create fugitive dust, traffic and lighting from construction and operations that would create visual distractions for users of the Joshua Tree Wilderness Area, Chuckwalla Mountains Wilderness Area, and Desert Lily Preserve ACEC areas.

COMMENT SET B005, CONT.
NATIONAL PARKS CONSERVATION ASSOCIATION

NPCA is also concerned that EnXco's site technology- solar panels that move to track the sun- would create a reflective disturbance and contrast that could be observed from within Joshua Tree National Park. We therefore urge EnXco to incorporate the same fixed solar panels used in the adjacent Desert Sunlight Solar Farm to reduce adverse visual impacts to Joshua Tree National Park wilderness and other nearby protected areas. Finally, if the proposed project moves forward, it should incorporate recommendations of the International Dark Sky Association on how to best mitigate and minimize light pollution emanating from the project. B005-2 co

Cumulative Impacts Section must be Expanded B005-3

Cumulative impacts are those effects resulting from the incremental impacts of an action when combined with other past, present, and reasonably foreseeable future projects or actions. The current cumulative impacts section is inadequate in that it leaves out two key projects that could be developed in the foreseeable future: the Glorious Land Company's proposed Paradise Valley Development and the proposed Riverside East Solar Energy Zone. The Paradise Valley Development is located approximately 35 miles from the Desert Harvest Solar Farm project site and portions of the Riverside East Solar Energy Zone are even closer. To exclude both of those projects from a cumulative impacts analysis is misleading because these projects would profoundly impact air quality, water resources, wilderness and wildlife habitat and connectivity.

The Glorious Land Company's Paradise Valley development is a proposed city, resort and golf club, due east of Indio, on ecologically sensitive land known as Shaver's Valley, north and south of the I-10 Freeway. A previous iteration of this Paradise Valley development indicated that the city could house 45,000 people in a largely undeveloped area. This project could adversely impact the national park, adjacent wilderness, sensitive species and habitats and water resources. It would also result in urban sprawl, leapfrog development and increased congestion along the I-10 freeway. Currently, the Glorious Land Company is attempting to address the Coachella Valley Multiple Habitat Species Plan (CVMHSP) conservation requirements and is developing a footprint which will be reviewed through the Riverside County Planning Department.

The Solar Programmatic Environmental Impact Statement (Solar PEIS) is the result of Federal Energy Policy and legislation. The Bureau of Land Management and the Department of Energy initiated the Solar PEIS, a study that evaluates the potential for solar energy development on public lands in six western states, including California. The plan is programmatic and identified several Solar Energy Zones (SEZ) in California. These are areas well suited for solar energy development and include the Riverside East Solar Energy Zone just to the South and East of Joshua Tree National Park. B005-4

The original Solar PEIS draft received over 80,000 public comments and as a result of stakeholder input, a supplement was published. In the new Solar PEIS Supplement, the proposed Riverside East SEZ was reduced from 202,896 acres (821 km^2) to 147,910 acres to better protect Joshua Tree National Park and sensitive ecological areas within the boundaries of the Riverside East SEZ. The plan rests on several assumptions, including the fact that up to 80% of the land within SEZs could be utilized for Solar Facilities over the 20-year study period. This scenario, identified by a federal plan, must be evaluated in the Desert Harvest Solar Farm Final EIS Cumulative Impacts Analysis, as it is likely to occur in the foreseeable future.

COMMENT SET B005, CONT.
NATIONAL PARKS CONSERVATION ASSOCIATION

Air Quality

B005-5

The Desert Harvest Solar Farm could harm Joshua Tree National Park's air quality and has the potential to contribute to regional air quality problems that could further impact the park.

Joshua Tree National Park's October 2011 Foundation Statement points out that:

- Ozone levels within Joshua Tree National Park are in non-attainment status and are not improving;
- Dust, both natural and resulting from land use change are impacting park air. The park is in non attainment status for fine particulate matter PM 10 and PM 2.5;
- Photochemical smog effects on visibility are considerable.

The elimination of desert vegetation on the project site will likely cause fugitive dustwhile emissions from vehicles and equipment will likely contribute to poor air quality during both construction and operation. NPCA requests that project proponents develop air quality monitoring stations or share responsibility with the adjacent Desert Sunlight Solar Farm to give Joshua Tree National Park access for real-time air quality data so that park staff can fully assess the impact of these projects and work to reduce them.

Furthermore, the geographic scope for air quality cumulative impacts as identified in the Draft EIS is a 6-mile radius for regionally based impacts and a one-mile radius for sensitive receptor impacts. What is perplexing about this methodology is that most of the actual viewsheds are far larger. For example, from Key's View, on a clear day, visitors to Joshua Tree National Park can see the Mexican border and the 10,000-foot-high Mount San Jacinto, over 50 miles away, but on days with poor visibility both these viewsheds are obscured. The methodology identified within the Draft EIS diminishes the true scope and value of visual resources from Joshua Tree National Park and underestimates the cumulative impacts of proposed projects to visual resources in our national parks. With regard to Keys View, numerous visitors have reported to NPCA their disappointment upon arriving at the overlook because of the poor visibility (haze) caused by pollution. Visitors that go there want to see the vastness of the desert lying before them in all of its splendor, but many of those visitors see an ugly brown cloud or a pervasive gray haze that obscures that beautiful view. The obscured views may have an impact on visitors and visitor spending if it continues.

Impacts to Desert Tortoise

B005-6

The proposed project would also contribute to a substantial cumulative loss of desert tortoise habitat and connectivity among the Chuckwalla and Joshua Tree Desert Wildlife Management Areas and critical habitat areas, as well as the greater connectivity between the Colorado Desert Recovery Unit and the Western Mojave Recovery Unit.

COMMENT SET B005, CONT.
NATIONAL PARKS CONSERVATION ASSOCIATION

B005-6 c

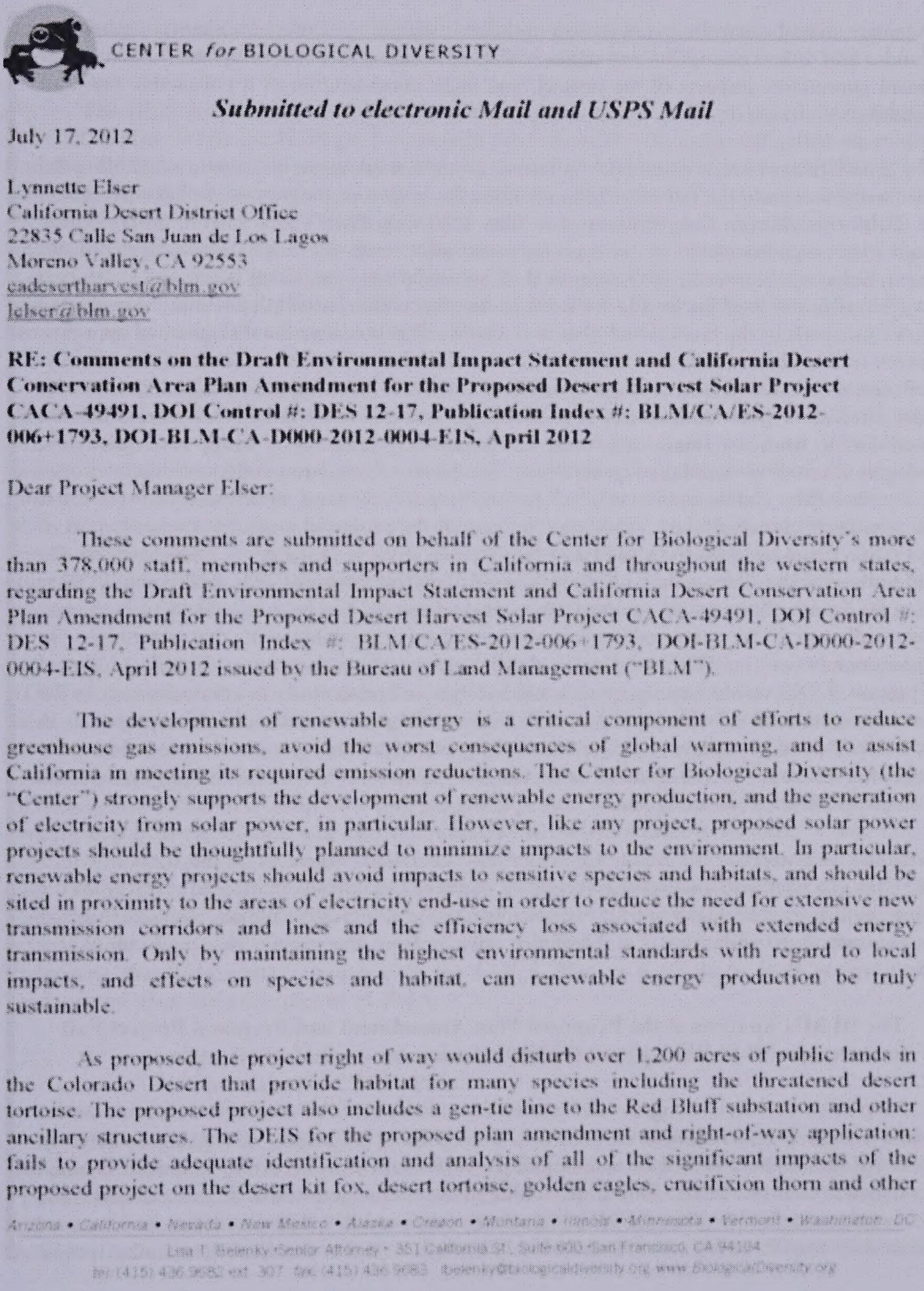
In the Draft EIS, Table 4.4-4 shows cumulative impacts to Colorado Desert Recovery Unit to Desert Tortoise habitat. The columns on this table indicate the total amount of desert tortoise habitat as well as the amount impacted by foreseeable and existing projects. It's interesting to note that foreseeable projects will affect almost 270,000 acres of desert tortoise habitat while existing projects will affect around 132,000 acres of habitat. That's a total of approximately 400,000 acres of desert tortoise habitat that will be degraded or destroyed by renewable energy development and raises the question about whether recovery of the desert tortoise can occur with this level of intensity of regional development.

In closing, NPCA thanks the Bureau of Land Management for the opportunity to comment on the Desert Harvest Solar Farm and looks forward to reviewing the Final Environmental Impact Statement.

Sincerely,

Seth Shteir, California Desert Field Representative
National Parks Conservation Association
61325 Twentynine Palms Hwy., Suite B
Joshua Tree, CA 92252
sshteir@npca.org
760-332-9776

COMMENT SET B006
CENTER FOR BIOLOGICAL DIVERSITY



CENTER *for* BIOLOGICAL DIVERSITY

Submitted to electronic Mail and USPS Mail

July 17, 2012

Lynnette Elser
California Desert District Office
22835 Calle San Juan de Los Lagos
Moreno Valley, CA 92553
cadesertharvest@blm.gov
lelser@blm.gov

RE: Comments on the Draft Environmental Impact Statement and California Desert Conservation Area Plan Amendment for the Proposed Desert Harvest Solar Project CACA-49491, DOI Control #: DES 12-17, Publication Index #: BLM/CA/ES-2012-006+1793, DOI-BLM-CA-D000-2012-0004-EIS, April 2012

Dear Project Manager Elser:

These comments are submitted on behalf of the Center for Biological Diversity's more than 378,000 staff, members and supporters in California and throughout the western states, regarding the Draft Environmental Impact Statement and California Desert Conservation Area Plan Amendment for the Proposed Desert Harvest Solar Project CACA-49491, DOI Control #: DES 12-17, Publication Index #: BLM/CA/ES-2012-006+1793, DOI-BLM-CA-D000-2012-0004-EIS, April 2012 issued by the Bureau of Land Management ("BLM").

The development of renewable energy is a critical component of efforts to reduce greenhouse gas emissions, avoid the worst consequences of global warming, and to assist California in meeting its required emission reductions. The Center for Biological Diversity (the "Center") strongly supports the development of renewable energy production, and the generation of electricity from solar power, in particular. However, like any project, proposed solar power projects should be thoughtfully planned to minimize impacts to the environment. In particular, renewable energy projects should avoid impacts to sensitive species and habitats, and should be sited in proximity to the areas of electricity end-use in order to reduce the need for extensive new transmission corridors and lines and the efficiency loss associated with extended energy transmission. Only by maintaining the highest environmental standards with regard to local impacts, and effects on species and habitat, can renewable energy production be truly sustainable.

As proposed, the project right of way would disturb over 1,200 acres of public lands in the Colorado Desert that provide habitat for many species including the threatened desert tortoise. The proposed project also includes a gen-tie line to the Red Bluff substation and other ancillary structures. The DEIS for the proposed plan amendment and right-of-way application: fails to provide adequate identification and analysis of all of the significant impacts of the proposed project on the desert kit fox, desert tortoise, golden eagles, crucifixion thorn and other

B006-1

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Lisa T. Belenky, Senior Attorney • 351 California St., Suite 600 • San Francisco, CA 94104
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COMMENT SET B006, CONT.
CENTER FOR BIOLOGICAL DIVERSITY

B006-1 co

rare plants, animals and vegetation communities including Colorado desert microphyll woodlands, and other biological resources. The DEIS also fails to adequately address the significant cumulative impacts of the project; and lacks consideration of a reasonable range of alternatives.

Of particular concern is the BLM's failure to include adequate information regarding the impacts to resources and the failure to fully examine the impact of the proposed plan amendment to the California Desert Conservation Act Plan ("CDCA Plan") along with other similar proposed plan amendments from other projects and as a result the current piecemeal process appears to be on track to result in the approval of industrial sites sprawling across the California Desert generally, and the Chuckwalla Valley in particular, within habitat that should be protected to achieve the goals of the bioregional plan as a whole. This piecemeal and segmented approach maximizes (rather than minimizes) the indirect and cumulative impacts of each of the projects and will cause extensive habitat fragmentation. The DEIS also fails to *adequately* consider potential alternative plan amendments that would protect the most sensitive lands within the proposed ROW from all future industrial development. Alternative siting and alternative technologies (including distributed generation) should also have been fully considered in the DEIS, because they could significantly reduce the impacts to many species, soils, and water resources in the Colorado Desert. Although the area of the proposed project is currently part of the evaluation being undertaken by the BLM for the solar PEIS for solar energy zones, within the western portion of the "Riverside East" proposed solar energy zone ("SEZ"), unfortunately, there has been no final environmental documentation or decision on that process and there is, as yet, no way to discern if the proposed project siting will be compatible with that planning. In scoping comments on the PEIS, the Center raised concerns about the impacts that development of the proposed SEZ would have to species and habitats and particularly to connectivity. As the Center has emphasized in our comments on the various large-scale industrial solar proposals in the California desert, planning should be done *before* site specific projects are approved in order to ensure that resources are adequately protected from sprawl development and project impacts are avoided, minimized and mitigated.

In the sections that follow, the Center provides detailed comments on the ways in which the DEIS fails to adequately identify and analyze many of the impacts that could result from the proposed project, including but not limited to: impacts to biological resources, impacts to water resources, impacts to soils, direct and indirect impacts from the gen-tie line, and cumulative impacts.

I. The BLM's Analysis of the Proposed Plan Amendment and Proposed Project Fail to Comply with FLPMA.

As part of FLPMA, Congress designated 25 million acres of southern California as the California Desert Conservation Area ("CDCA"). 43 U.S.C. § 1781(c). Congress declared in FLPMA that the CDCA is a rich and unique environment teeming with "historical, scenic, archaeological, environmental, biological, cultural, scientific, educational, recreational, and economic resources." 43 U.S.C. § 1781(a)(2). Congress found that this desert and its resources are "extremely fragile, easily scarred, and slowly healed." *Id.* For the CDCA and other public

COMMENT SET B006, CONT.
CENTER FOR BIOLOGICAL DIVERSITY

lands. Congress mandated that the BLM "shall, by regulation or otherwise, take any action necessary to prevent unnecessary or undue degradation of the lands." 43 U.S.C § 1732(b).

B006-1 cont.

The DEIS does not appear to provide the specific language of the proposed amendment to the CDCA plan. While the DEIS (at 2-4 through 2-24) describes the proposed action alternative, and the DEIS lays out the process for a California Desert Conservation Area (CDCA) plan amendment (DEIS at 2-4), it fails to identify the specific parameters of the proposed amendment for the proposed project or the alternatives that involve a potential plan amendment. Given the impact of the proposed project on other multiple uses of these public lands at the proposed site as well as other aspects of the bioregional planning, it is clear that BLM may also need to amend other parts of the CDCA plan as well and should have looked at additional and/or different amendments as part of the alternatives analysis.

B006-2

While the Center supports additional protections for species and habitats on public land that could accrue (for example by adoption the no action alternative 3 which would not allow solar development on the proposed project site and a plan amendment to find the site unsuitable and not available for large scale solar development), we have several concerns with the proposed land use amendments not the least of which is the BLM's failure to accurately address the limits of those protections on the ground under the current regulatory and statutory framework that applies to these public lands. For example, most of the lands that would be excluded from new solar ROW siting under the proposal are MUC class M lands that are open to multiple other high intensity uses. *See* CDCA Plan at 13. Specific comments on the proposal are discussed below:

BLM has failed to take a comprehensive look at the proposed plan amendment for the ROW to determine: 1) whether industrial scale projects are appropriate for any of the public lands in this area; 2) if so, how much of the public lands are suitable for such industrial uses given the need to balance other management goals including preservation of habitat and water resources; and 3) the location of the public lands suitable for such uses. As noted above, the BLM has also failed to explain how this proposed project would interface with the Solar PEIS process that is already under way and was intended to consider these questions. It also fails to address how the proposed project interfaces with the Desert Renewable Energy Conservation Plan (DRECP) to which the BLM is signatory to the Memorandum of Understanding. The Center remains concerned that the result of the current process is a piecemeal approach to project review with site-specific approvals made before planning is completed which threatens to undermine the "bioregional" approach in the CDCA Plan as a whole as well as violate the fundamental planning principles of FLPMA.

B006-3

A. The DEIS Fails to Adequately Address the Plan Amendment in the Context of the CDCA Plan.

Unfortunately, the DEIS fails to adequately consider the impacts of the proposed project and plan amendment and reasonable alternatives in the context of FLPMA and the CDCA Plan. FLPMA requires that in developing and revising land use plans, the BLM consider many factors and "use a systematic interdisciplinary approach to achieve integrated consideration of physical, biological, economic, and other sciences . . . consider the relative scarcity of the values involved

COMMENT SET B006, CONT.
CENTER FOR BIOLOGICAL DIVERSITY

and the availability of alternative means (including recycling) and sites for realization of those values." 43 U.S.C. § 1712(c). As stated clearly in the CDCA Plan: B006-3 cor

> The goal of the Plan is to provide for the use of the public lands, and resources of the California Desert Conservation Area, including economic, educational, scientific, and recreational uses, in a manner which enhances wherever possible—and which does not diminish, on balance—the environmental, cultural, and aesthetic values of the Desert and its productivity.

CDCA Plan at 5-6. The CDCA Plan also provides several overarching management principles:

> MANAGEMENT PRINCIPLES
>
> The management principles contained in the law (FLPMA)—*multiple use, sustained yield, and the maintenance of environmental quality*—are not simple guides. Resolution of conflicts in the California Desert Plan requires innovative management approaches for everything from wilderness and wildlife to grazing and mineral development. These approaches include:
>
> —Seeking simplicity for management direction and public understanding, avoiding complication and confusing in detail which would make the Plan in comprehensive and unworkable.
>
> —Development of decision-making processes using appropriate guidelines and criteria which provide for public review and understanding. These processes are designed to help in allowing for the use of desert lands and resources while preventing their undue degradation or impairment.
>
> *—Responding to national priority needs for resource use and development, both today and in the future, including such paramount priorities as energy development and transmission, without compromising the basic desert resources of soil, air, water, and vegetation, or public values such as wildlife, cultural resources, or magnificent desert scenery. This means, in the face of unknowns, erring on the side of conservation in order not to risk today what we cannot replace tomorrow.*
>
> *—Recognizing that the natural patterns of the California Desert, its geological and biological systems, are the basis for planning*, and that human use patterns, from freeways to fence lines, define its boundaries. Only in this way can the public resources can be understood and protected by the Plan that can be publicly comprehended, accepted, and followed.

CDCA Plan 1980 at 6 (first emphasis in original, second emphasis added). B006-4

The CDCA Plan anticipated that there would be multiple plan amendments over the life of the plan and provides specific requirements for analysis of Plan amendments. Those requirements include determining "if alternative locations within the CDCA are available which would meet the applicant's needs without requiring a change in the Plan's classification, or an amendment to any Plan element" and evaluating "the effect of the proposed amendment on BLM

COMMENT SET B006, CONT.
CENTER FOR BIOLOGICAL DIVERSITY

management's desert-wide obligation to achieve and maintain a balance between resource use and resource protection." CDCA Plan at 121. BLM reads this portion of the CDCA plan extremely narrowly and attempts to divorce it from the required NEPA analysis and alternatives. Looking at the CDCA Plan requirement in context with the NEPA review it is clear that the BLM is required to analyze not only whether alternative locations are available that would not require a plan amendment, but also how the proposed amendment will affect desert-wide resource protection and whether alternative locations and alternative plan amendments will avoid or lessen those impacts—BLM fails to address the latter issue and did not look at any site alternatives in detail. The inclusion of multiple "no action" or "no project" alternatives, two reduced acreage alternatives, and a reduced acreage/high profile alternative as part of the NEPA analysis fails to cure this omission. B006-4 cont.

The CDCA Plan includes the Energy Production and Utility Corridors Element which is focused primarily on utility corridors with brief discussion of powerplant siting. Even in 1980 the CDCA Plan contemplated that alternative energy projects would likely be developed in the future but did not expressly provide planning direction for solar energy production. Nonetheless, the overarching principles expressed in the Decision Criteria are also applicable to the proposed project here including minimizing the number of separate rights-of-way, providing alternatives for consideration during the processing of applications, and "avoid[ing] sensitive resources wherever possible." CDCA Plan at 93. Nothing in the DEIS shows that BLM considered the landscape level issues and management objectives or alternatives to the proposed plan amendment *in the DEIS*. B006-5

In addition, BLM should have considered the impacts to existing land use plans for these public lands across several scales including, for example: in the Chuckwalla valley, in the Colorado Desert in California; and in the CDCA as a whole. B006-6

B. The DEIS Fails to Adequately Address Impacts to Multiple Use Class M Lands and Loss of Multiple Use in Favor of a Single Use for Industrial Purposes.

B006-7

As FLPMA declares, public lands are to be managed for multiple uses "in a manner that will protect the quality of the scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values." 43 U.S.C.§ 1701(a)(7) & (8). The CDCA Plan as amended provides for four distinct multiple use classes based on the sensitivity of resources in each area. The proposed project site is in MUC class M lands. DEIS at 3.19-6. Under the CDCA Plan, Multiple-use Class M (Moderate Use) "is based upon a *controlled balance* between higher intensity use and protection of public lands. This class provides for a wide variety o[f] present and future uses such as mining, livestock grazing, recreation, energy, and utility development. Class M management is *also* designed to conserve desert resources and to mitigate damage to those resources which permitted uses may cause." CDCA Plan at 13 (emphasis added).

The DEIS fails to accurately identify that the proposed project is a high-intensity, single use of resources that will displace all other uses and that will significantly diminish (indeed, completely destroy) approximately 1,300 acres of desert tortoise habitat, including critical

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habitat, impeding potential tortoise habitat and linkage, as well as directly impacting habitat for other rare species. While the DEIS considers some alternative configurations that would avoid some impacts to some resources, it still fails to consider how the loss of multiple uses in such a large area might affect other nearby public lands in the CDCA such as creating greater pressures on those land for the remaining multiple uses. B006-7 co

B006-8

The DEIS does not consider whether and how new access roads created for the proposed project may increase off-road vehicle use in this area and thereby significantly increase impacts from ORVs on species and habitats surrounding the proposed project. As another example, the DEIS is unclear as to the extent that the proposal would require changes in the route network resulting in routes which would need to be moved—those changes to the route network are simply not addressed in the DEIS (nor are the likely direct, indirect and cumulative impacts of changing those route designations adequately identified or analyzed, as discussed in detail below). Any changes to routes would require BLM to amend the route designations in the area because these routes are part of a network that was adopted through a plan amendment. When BLM does consider these issues, as it must, in a revised or supplemental DEIS, a range of alternatives must be considered in addition to the fact that such changes will undoubtedly change use of the previously existing nearby routes, most likely causing increased use on other nearby routes. Even if BLM attempts to simply reroute along the fence line for the proposed project a plan amendment would be required and BLM must then consider that new unauthorized routes to provide connections to the other routes, and/or entirely new unauthorized routes may be created by off-road vehicle users *to avoid the industrial site entirely*. There is no evidence that recreational off-road vehicle users will be content to drive for miles along a fence adjoining an industrial site rather than striking off cross-country to connect with more scenic routes. Past experience shows that the latter is quite understandably a much more likely outcome and BLM should recognize this in analyzing the impacts of this project on the existing route network and any proposal to amend that network. While the proposed project attempts to avoid rare plants and animal locations through project design, it inadvertently focuses the on-going multiple use impacts into these very same areas which harbor the most sensitive resources.

B006-9

C. Fails to Adequately Address Other Ongoing Planning Efforts

As noted above, the DEIS fails to adequately address the proposed project in the context of the ongoing PEIS planning process for solar development in six western states undertaken by BLM and DOE, where a final plan is tentatively slated to be released in less than 14 days. The scoping and early maps for the PEIS did identify this area as a proposed solar energy study area[1], however, without prior planning and analysis being completed, there is a high risk that the direct, indirect and cumulative impacts of the proposed project in conjunction with others may lead to sprawl development in the area and undermine the planning for renewable energy industrial zones that BLM has undertaken. It also has not address the proposed project in the context of the DRECP and the need for establishing durable conservation.

The BLM has failed to explain how this site specific approval would interface with, or alternatively undermine, the solar programmatic planning by federal agencies for the western states or the Desert Renewable Energy Conservation Plan (DRECP). These critical issue

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[1] http://solareis.anl.gov/documents/supp/maps/sezs/Riverside_East_map.pdf

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regarding planning on public lands are not adequately addressed in the DEIS. The BLM needs to analyze how the PEIS could be affected by the approval of this and the other multiple projects in the area and may undermine the planning for a solar zone in this area. Such analysis *after the fact* is not consistent with the planning requirements of FLPMA or, indeed, any rational land use planning principles. While the DEIS mentions the DRECP (and the Solar PEIS) (at 3.11-2) it does not actually evaluate the project under the project review requirements of the NCCP Act, which is required of BLM as a signatory to the DRECP Memorandum of Understanding. B006-9 cont.

D. BLM Failed to Inventory the Resources of these Public Lands Before Making a Decision to Allow Destruction of those Resources

B006-10

FLPMA states that "[t]he Secretary shall prepare and maintain on a continuing basis an inventory of all public lands and their resource and other values," and this "[t]his inventory shall be kept current so as to reflect changes in conditions and to identify new and emerging resource and other values." 43 U.S.C. § 1711(a). FLPMA also requires that this inventory form the basis of the land use planning process. 43 U.S.C. § 1701(a)(2). *See Center for Biological Diversity v. Bureau of Land Management*, 422 F.Supp.2d 1115, 1166-67 (N.D. Cal. 2006) (discussing need for BLM to take into account known resources in making management decisions); *ONDA v. Rasmussen*, 451 F.Supp. 2d 1202, 1212-13 (D. Or. 2006) (finding that BLM did not take a hard look under NEPA by relying on outdated inventories and such reliance was inconsistent with BLM's statutory obligations to engage in a continuing inventory under FLPMA). It is clear that BLM should not approve a management plan amendment based on outdated and inadequate inventories of affected resources on public lands.

As detailed below in the NEPA sections, here BLM has failed to compile an adequate inventory of the resources of the public lands that could be affected by the proposed project *before* preparing the DEIS (including, e.g., desert tortoise densities, rare plants, golden eagle surveys, and other biological resources) which is necessary in order to adequately assess the impacts to resources of these public lands in light of the proposed plan amendment and BLM has also failed to adequately analyze impacts on known resources. For example, the DEIS states for instance that the bird point count surveys were only done for a maximum of nine days in 2011 (Appendix C.4) and no bat survey were performed. Only a single year of botanical surveys were implemented (Appendix C.3 and C.5). Inventories of desert kit fox and badgers were not implemented despite that fact that these fur-bearing mammals are protected under California law. Golden eagles were only surveyed for a single winter nest survey, although these surveys identified many more nests within the 10-mile radius than other projects currently under construction or permitted identified. Even three years of surveys may be inadequate to evaluate the rare species on the project site due to the episodic nature of rainfall and the resources that precipitation supports. Coupled with the large size of the proposed project, as well as related and cumulative projects, this proposed project would typically have been subject to many years of careful field surveys and documentation of onsite resources.

Therefore, it appears that a revised DEIS or supplemental DEIS must be prepared to include several categories of new information including new survey data about the resources of the site and potential impacts of the project on resources of our public land and water, and that document must be circulated for public review and comment.

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B006-11

E. The DEIS Fails to Provide Adequate Information to Ensure that the BLM will Prevent Unnecessary and Undue Degradation of Public lands

FLPMA requires BLM to "take any action necessary to prevent unnecessary or undue degradation of the lands" and "minimize adverse impacts on the natural, environmental, scientific, cultural, and other resources and values (including fish and wildlife habitat) of the public lands involved." 43 U.S.C. §§ 1732(b), 1732(d)(2)(a). Without adequate information and analysis of the current status of the resources of these public lands, BLM cannot fulfill its duty to prevent unnecessary or undue degradation of the public lands and resources. Thus, the failure to provide an adequate current inventory of resources and environmental review undermines BLM's ability to protect and manage these lands in accordance with the statutory directive.

BLM has failed to properly identify and analyze impacts to the resources including the impacts from all of the project components. As detailed below, the BLM's failure in this regard violates the most basic requirements of NEPA and in addition undermines the BLM's ability to ensure that the proposal does not cause unnecessary and undue degradation of public lands. *See Island Mountain Protectors*, 144 IBLA 168, 202 (1998) (holding that "[t]o the extent BLM failed to meet its obligations under NEPA, it also failed to protect public lands from unnecessary or undue degradation."); *National Wildlife Federation*, 140 IBLA 85, 101 (1997) (holding that "BLM violated FLPMA, because it failed to engage in any reasoned or informed decisionmaking process" or show that it had "balanced competing resource values").

B006-12

II. The DEIS Fails to Comply with NEPA.

NEPA is the "basic charter for protection of the environment." 40 C.F.R. § 1500.1(a). In NEPA, Congress declared a national policy of "creat[ing] and maintain[ing] conditions under which man and nature can exist in productive harmony." *Or. Natural Desert Ass'n v. Bureau of Land Mgmt.*, 531 F.3d 1114, 1120 (9th Cir. 2008) (quoting 42 U.S.C. § 4331(a)). NEPA is intended to "ensure that [federal agencies] ... will have detailed information concerning significant environmental impacts" and "guarantee[] that the relevant information will be made available to the larger [public] audience." *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1212 (9th Cir. 1998).

Under NEPA, before a federal agency takes a "'major [f]ederal action[] significantly affecting the quality' of the environment," the agency must prepare an environmental impact statement (EIS). *Kern v. U.S. Bureau of Land Mgmt.*, 284 F.3d 1062, 1067 (9th Cir. 2002) (quoting 43 U.S.C. § 4332(2)(C)). "An EIS is a thorough analysis of the potential environmental impact that 'provide[s] full and fair discussion of significant environmental impacts and ... inform[s] decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.'" *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.*, 387 F.3d 989, 993 (9th Cir. 2004) (citing 40 C.F.R. § 1502.1). An EIS is NEPA's "chief tool" and is "designed as an 'action-forcing device to [e]nsure that the policies and goals defined in the Act are infused into the ongoing programs and actions of the Federal Government.'" *Or. Natural Desert Ass'n*, 531 F.3d at 1121 (quoting 40 C.F.R. § 1502.1).

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B006-12 cont.

An EIS must identify and analyze the direct, indirect, and cumulative effects of the proposed action. This requires more than "general statements about possible effects and some risk" or simply conclusory statements regarding the impacts of a project. *Klamath Siskiyou Wildlands Center v. BLM*, 387 F.3d 989, 995 (9th Cir. 2004) (citation omitted); *Oregon Natural Resources Council v. BLM*, 470 F.3d 818, 822-23 (9th Cir. 2006). Conclusory statements alone "do not equip a decisionmaker to make an informed decision about alternative courses of action or a court to review the Secretary's reasoning." *NRDC v. Hodel*, 865 F.2d 288, 298 (D.C. Cir. 1988).

NEPA also requires BLM to ensure the scientific integrity and accuracy of the information used in its decision-making. 40 CFR § 1502.24. The regulations specify that the agency "must insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential." 40 C.F.R. § 1500.1(b). Where there is incomplete information that is relevant to the reasonably foreseeable impacts of a project and essential for a reasoned choice among alternatives, the BLM must obtain that information unless the costs of doing so would be exorbitant or the means of obtaining the information are unknown. 40 C.F.R. § 1502.22. Here the costs are reasonable to obtain information needed to complete the analysis and the BLM must provide additional information in the EIS—through a supplement or revised EIS. Even in those instances where complete data is unavailable, the EIS also must contain an analysis of the worst-case scenario resulting from the proposed project. *Friends of Endangered Species v. Jantzen*, 760 F.3d 976, 988 (9th Cir. 1985) (NEPA requires a worst case analysis when information relevant to impacts is essential and not known and the costs of obtaining the information are exorbitant or the means of obtaining it are not known) *citing Save our Ecosystems v. Clark*, 747 F.2d 1240, 1243 (9th Cir. 1984); 40 C.F.R. § 1502.22.

A. Purpose And Need and Project Description are Too Narrowly Construed and Unlawfully Segment the Analysis

Agencies cannot narrow the purpose and need statement to fit only the proposed project in the proposed location and then shape their findings to approve that project without a "hard look" at the environmental consequences. To do so would allow an agency to circumvent environmental laws by simply "going-through-the-motions." It is well established that NEPA review cannot be "used to rationalize or justify decisions already made." 40 C.F.R. § 1502.5; *Metcalf v. Daley*, 214 F.3d 1135, 1141-42 (9th Cir. 2000) ("the comprehensive 'hard look' mandated by Congress and required by the statute must be timely, and it must be taken objectively and in good faith, not as an exercise in form over substance, and not as a subterfuge designed to rationalize a decision already made.") As Ninth Circuit noted an "agency cannot define its objectives in unreasonably narrow terms." *City of Carmel-by-the-Sea v. U.S. Dept. of Transportation*, 123 F.3d 1142, 1155 (9th Cir. 1997); *Muckleshot Indian Tribe v. U.S. Forest Service*, 177 F. 3d 900, 812 (9th Cir. 1999). The statement of purpose and alternatives are closely linked since "the stated goal of a project necessarily dictates the range of 'reasonable' alternatives." *City of Carmel*, 123 F.3d at 1155. The Ninth Circuit recently reaffirmed this point in *National Parks Conservation Assn v. BLM*, 586 F.3d 735, 746-48 (9th Cir. 2009) (holding that

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"[a]s a result of [an] unreasonably narrow purpose and need statement, the BLM necessarily considered an unreasonably narrow range of alternatives" in violation of NEPA).

B006-12 co

The purpose behind the requirement that the purpose and need statement not be unreasonably narrow, and NEPA in general is, in large part, to "guarantee[ ] that the relevant information will be made available to the larger audience that may also play a role in both the decision-making process and the implementation of that decision." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989). The agency cannot camouflage its analysis or avoid robust public input, because "the very purpose of a draft and the ensuing comment period is to elicit suggestions and criticisms to enhance the proposed project." *City of Carmel-by-the-Sea*, 123 F.3d at 1156. The agency cannot circumvent relevant public input by narrowing the purpose and need so that no alternatives can be meaningfully explored or by failing to review a reasonable range of alternatives.

The BLM's purpose and need for the proposed Desert Harvest project is "to respond to a FLPMA ROW application submitted by enXco to construct, operate, maintain, and decommission a solar energy–generating facility and associated infrastructure on public lands administered by the BLM in compliance with FLPMA, BLM ROW regulations, and other applicable federal laws and policies." (DEIS at 1-4), and also states that the "BLM authorities include:

- The Energy Policy Act 2005 (EPAct), Title II, Section 211, which sets forth the "sense of Congress" that the Secretary of the Interior should seek to have approved non-hydropower renewable energy projects on the public lands with a generation capacity of at least 10,000 MW by 2015
- Executive Order 13212, dated May 18, 2001, which mandates that agencies act expediently and in a manner consistent with applicable laws to increase the production and transmission of energy in a safe and environmentally sound manner.
- Secretarial Order 3285A1, dated February 22, 2010, and amended on February 22, 2010, which establishes the development of renewable energy as a priority for the Department of the Interior.

(DEIS at 1-4). The DEIS notes that an amendment to the CDCA Plan is needed in order to approve the project but does not clearly identify the plan amendment as a part of the project being evaluated, nor provide language as to what that amendment includes. While the DEIS includes six alternatives that would require a plan amendment including two that are "no project" alternatives, the BLM's purpose and need is still very narrowly construed to the proposed project itself and an amendment to the Plan. The purpose and need provided in the DEIS is impermissibly narrow under NEPA for several reasons, most importantly because it forecloses meaningful alternatives review in the DEIS. Because the purpose and need and the alternatives analysis are at the "heart" of NEPA review and affect nearly all other aspects of the EIS, on this basis and others, BLM must revise and re-circulate the DEIS.

Additionally, in its discussion of the need for renewable energy production the DEIS fails to address risks associated with global climate change in context of including both the need for climate change mitigation strategies (e.g., reducing greenhouse gas emissions) and the need for

B006-13

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climate change adaptation strategies (e.g., conserving intact wild lands and the corridors that connect them). All climate change adaptation strategies underline the importance of protecting intact wild lands and associated wildlife corridors as a priority adaptation strategy measure.

The habitat fragmentation, loss of connectivity for terrestrial wildlife, and introduction of predators and invasive weed species associated with the proposed project in the proposed location may run contrary to an effective climate change adaptation strategy. Siting the proposed project in the proposed location impacting ecologically functioning ecosystems, occupied habitat and important habitat linkage areas, microphyll woodland washes and other fragile desert resources could undermine a meaningful climate change adaptation strategy with a poorly executed climate change mitigation strategy. Moreover, the project itself will emit greenhouse gases during construction and manufacturing in particular and the DEIS contains no discussion of ways to avoid, minimize or off-set these emissions although such mitigation is clearly necessary. The way to maintain healthy, vibrant ecosystems is not to fragment them and reduce their biodiversity.

B. The DEIS Does Not Adequately Describe Environmental Baseline

B006-14

BLM is required to "describe the environment of the areas to be affected or created by the alternatives under consideration." 40 CFR § 1502.15. The establishment of the baseline conditions of the affected environment is a practical requirement of the NEPA process. In *Half Moon Bay Fisherman's Marketing Ass'n v. Carlucci*, 857 F.2d 505, 510 (9th Cir. 1988), the Ninth Circuit states that "without establishing . . . baseline conditions . . . there is simply no way to determine what effect [an action] will have on the environment, and consequently, no way to comply with NEPA." Similarly, without a clear understanding of the current status of these public lands BLM cannot make a rational decision regarding proposed project. *See Center for Biological Diversity v. U.S. Bureau of Land Management, et al.*, 422 F. Supp. 2d 1115, 1166-68 (N.D. Cal. 2006) (holding that it was arbitrary and capricious for BLM to approve a project based on outdated and inaccurate information regarding biological resources found on public lands).

The DEIS fails to provide adequate baseline information and description of the environmental setting in many areas including in particular the status of rare plants, animals and communities including desert kit fox, desert tortoise, golden eagles, rare plants, and microphyll woodlands.

The baseline descriptions in the DEIS are inadequate particularly for the areas where surveys were a single season, a day, or not performed at all. As discussed below, because of the deficiencies of the baseline data for the proposed project area, the DEIS fails to adequately describe the environmental baseline. Many of the rare and common but essential species and habitats have incomplete and/or vague on-site descriptions that make determining the proposed project's impacts difficult at best. Some of the rare species habitats baseline conditions are totally absent and as a result no impact assessment is provided either. A supplemental document is required to fully identify the baseline conditions of the site, and that baseline needs to be used to evaluate the impacts of the proposed project.

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C. *Failure to Identify and Analyze Direct and Indirect Impacts to Biological Resources*

B006-15

The EIS fails to adequately analyze the direct, indirect, and cumulative impacts of the proposed project on the environment. The Ninth Circuit has made clear that NEPA requires agencies to take a "hard look" at the effects of proposed actions; a cursory review of environmental impacts will not stand. *Idaho Sporting Congress v. Thomas*, 137 F.3d 1146, 1150-52, 1154 (9th Cir. 1998). Where the BLM has incomplete or insufficient information, NEPA requires the agency to do the necessary work to obtain it where possible. 40 C.F.R. §1502.22; *see National Parks & Conservation Ass'n v. Babbitt*, 241 F.3d 722, 733 (9th Cir. 2001) ("lack of knowledge does not excuse the preparation of an EIS; rather it requires [the agency] to do the necessary work to obtain it.")

Moreover, BLM must look at reasonable mitigation measures to avoid impacts in the DEIS but failed to do so here. Even in those cases where the extent of impacts may be somewhat uncertain due to the complexity of the issues, BLM is not relieved of its responsibility under NEPA to discuss mitigation of reasonably likely impacts at the outset. Even if the discussion may of necessity be tentative or contingent, NEPA requires that the BLM provide some information regarding whether significant impacts could be avoided. *South Fork Band Council of Western Shoshone v. DOI*, 588 F.3d 718, 727 (9th Cir. 2009).

The lack of comprehensive surveys is particularly problematic. Failure to conduct sufficient surveys prior to construction of the project also effectively eliminates the most important function of surveys - using the information from the surveys to avoid and minimize harm caused by the project and reduce the need for mitigation. Often efforts to mitigate harm are far less effective than avoiding and preventing the harm in the first place. In addition, without understanding the scope of harm before it occurs, it is difficult to quantify an appropriate amount and type of mitigation.

The DEIS fails to provide all of the information necessary for decisionmakers and the public to adequately review the proposed project. Therefore the impacts cannot be fully analyzed or mitigated appropriately or fully. For this reason alone, a supplemental or revised DEIS needs to be provided and additional alternatives are included (including a preferred alternative) that avoids and reduces the impacts to biological resources.

B006-16

The Recirculated or Supplemental DEIS also should consider and include the final recommendations of the Independent Science Advisors (ISA) that was convened by the Desert Renewable Energy Conservation plan[2]. This eminent group of scientists from many different research backgrounds laid out some basic *Principles for Siting and Designing Renewable Energy Developments* including:

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[2] http://www.energy.ca.gov/2010publications/DRECP-1000-2010-008/DRECP-1000-2010-008-F.PDF

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B006-16 cont.

- **Maximize Use of Already Disturbed Lands**
- **Avoid Soil Disturbance**—
- **Avoid Disrupting Geological Processes**

(at page vi – Executive Summary). Clearly the proposed project and other project alternatives (except the no action and no project alternatives) fail to follow these three very basic principles.

With regards to transplantation and relocation, the ISA state that "In general, moving organisms from one area to another—for example, out of an impact area into a reserve area—is *not* a successful conservation action and may do more harm than good to conserved populations by spreading diseases, stressing resident animals, increasing mortality, and decreasing reproduction and genetic diversity. Transplantation or translocations should be considered a last recourse for unavoidable impacts, should never be considered full mitigation for the impact, and in all cases must be treated as experiments subject to long-term monitoring and management." (at pg. Vii – Executive Summary). Clearly the DEIS fails to consider the impacts of moving both plants and animals from the project site onto adjacent areas. As discussed below the DEIS fails to evaluate the impacts of any of the translocated species on resident species and habitat – at a minimum, carrying capacity (the ability of the habitat to support species) of the landscape where species area proposed to be moved needs to be included

B006-17

1. Desert Kit Fox

While the DEIS recognizes that the desert kit fox is a protected animal as a furbearing mammal under California Code of Regulations Title 14 Section 460 (DEIS at 3.4-3) and recognizes that desert kit fox occurs on site (at 3.4-9), no surveys were done to quantify the density of desert kit fox that will be displaced and "taken" by the proposed project. As the BLM is well aware, the first documentation of a deadly outbreak of canine distemper was confirmed in late 2011 in desert kit fox, when dead kit foxes found on and adjacent to the Genesis industrial solar project during construction were necropsied by state veterinarians.

Kit foxes have great fidelity to their natal burrows and as documented on the Genesis project site are not easily evicted from their burrows and home ranges through "passive relocation" or hazing. The DEIS incorrectly states that no "take" permits are given for desert kit fox, but as the BLM is aware, the California Department of Fish and Game did give take permits for desert kit foxes on Genesis to allow for trackable electronic collars for monitoring of some animals and inoculation against distemper. We request that take permits be sought for the onsite kit foxes to monitor the ultimate outcome of the hazing activities.

Despite the efforts of state and federal biologists, who tried to prevent the disease from spreading the efforts have not been successful, and so far the kit fox distemper epidemic has spread over eleven miles south of the Genesis project site. Hope is dimming that the epidemic can now be contained. Additional disruption of native populations of desert kit foxes from hazing them off this proposed project site, will result in additional displaced animals wandering the desert and potentially spreading the disease farther through the population.

The state wildlife veterinarian for the California Department of Fish and Game isn't certain the distemper outbreak is connected to the construction activities, but has concluded that

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habitat disturbance causes stress, and when animals succumb to stress they become more susceptible to disease. B006-17 con

The DEIS fails to quantify how many kit fox territories overlap the proposed project site, analyze the impacts from the proposed project or provide any avoidance, minimization or mitigation measures regarding this rare and declining species. Clearly the supplemental or revised DEIS needs to include a substantial section on the status of the on-site desert kit fox population and strategies to minimize and mitigate impacts to this species.

2. *Desert Tortoise*

B006-18

The desert tortoise has lived in the western deserts for tens of thousands of years. In the 1970's their populations were noted to decline. Subsequently, the species was listed as threatened by the State of California in 1989 and by the U.S. Fish and Wildlife Service in 1990, which then issued a Recovery Plan for the tortoise in 1994. The U.S. Fish and Wildlife Service is in the process of updating the Recovery Plan, and a Draft Updated Recovery Plan was issued in 2008, however it has not been finalized to date. Current data indicate a continued decline across the range of the listed species[3] despite its protected status and recovery actions.

The Updated Recovery Plan recognizes uniqueness in desert tortoise populations in California. This particular subpopulation of tortoise at the proposed project site is part of the Eastern Colorado Recovery unit[4]. Recent population genetics studies[5] have further reconfirmed 1994 Recovery Plan conclusions - the Eastern Colorado Recovery unit was one of the most genetically unique recovery units. While the proposed project site may have low desert tortoise densities, this particular recovery unit has also been documented to have the second highest declines in population over the last two years of published data – 37% decline[6]. The DEIS fails to identify and consider the localized impact to this recovery unit that is already in steep decline.

While the DEIS provides information on the number of burrows identified on the project site and notes that no live desert tortoise were found on the site, it misrepresents the impacts to desert tortoise because it does not present the estimated number of desert tortoises on the proposed project. Despite reliance on surveys and USFWS methodologies for estimating the number of desert tortoise on the proposed project site, the numbers may still be underestimated. On the Brightsource Ivanpah Valley site, which utilized the same type of surveys and estimation methodology, the numbers of desert tortoise on the whole three-phase site were estimated to be 38. However when clearance surveys for the *first phase* were implemented, at least 42 desert tortoise were found. The Brightsource site in Ivanpah Valley is also located in BLM designated "Category 3" habitat. Like this proposed project site, where DWMA is separated from the project site by Kaiser Road, Brightsource's Ivanpah site was separated from DWMA by Interstate 15. Despite both of these linear features have permeability for desert tortoises, the boundaries of the DWMAs were arbitrarily designated based on human constructed features (in this case roads), not necessarily the habitat

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[3] http://www.fws.gov/nevada/desert_tortoise/documents/reports/2007_Rangewide_Desert_Tortoise_Population_Monitoring.pdf

[4] http://ecos.fws.gov/docs/recovery_plans/1994/940628.pdf

[5] Murphy et al. 2007

[6] http://www.fws.gov/nevada/desert_tortoise/documents/reports/2007_Rangewide_Desert_Tortoise_Population_Monitoring.pdf

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B006-18 cont.

quality. As they survey results in and around this project area suggest, while the desert tortoise are not evenly distributed across the landscape, there are pockets of much higher density desert tortoise occupancy in these "Category 3" lands than even in parts of the DWMA that may be affected by the proposed project.

Likewise the USGS modeling of desert tortoise habitat is a good broad brush treatment of habitat, but as the results of the surveys associated with this proposed project confirm, the model does not always reflect the reality on the ground, where high sign of desert tortoise are located in an area of low habitat value (Appendix H – Figure 16). In addition, the categories of desert tortoise habitat were designated before the widespread recognition that global climate change was affecting the deserts. Now these Category 3 areas may be more important over the long-term either as habitat or connectivity for desert tortoise movement[7]

The map provided of the locations of desert tortoise burrows in and around the project site (DEIS at Appendix C.1 and C.2) are the locations where desert tortoise or burrows were documented during the surveys. However, desert tortoises are not static and utilize home ranges, where the size of the home range is generally sex dependent with males typically utilizing larger home ranges[8]. However, no determination of home ranges for tortoises is provided, so these data are provided are only a snapshot in time. No impacts to tortoise are analyzed, avoidance is unaddressed, minimization relies on a *draft* tortoise translocation plan, and mitigation is simply 1:1 acquisition without verification that acquisition is possible.

The DEIS provides a translocation plan in Appendix C.8. This draft plan violates the ISA recommendations[9] by proposing to translocate desert tortoise into the Chuckwalla DWMA. Recent desert tortoise translocations have resulted in significant short-term mortality of 45% or greater[10] and unknown long-term survivorship. The Revised Recovery Plan for desert tortoise recommends that translocation should implemented "in target areas to augment populations using a scientifically rigorous, research-based approach"[11]. However the translocation plan does not present any evidence that the proposed translocation site will augment populations nor does it provide any scientifically rigorous, research-based approach. Moreover, the locations are not protected in perpetuity from other habitat disturbing activities that could impact not only the resident desert tortoise, but any translocated tortoises.

Mechanisms need to be included to assure that any and all mitigation acquisitions will be conserved in perpetuity for the conservation of the desert tortoise. If those acquisitions are within existing Desert Wildlife Management Areas (DWMAs), higher levels of protection than are currently in place for DWMAs need to be put in place. NEPA mandates consideration of the relevant environmental factors and environmental review of "[b]oth *short- and long-term* effects" in order to determine the significance of the project's impacts. 40 C.F.R. § 1508.27(a) (emphasis added). BLM has clearly failed to do so in this instance with respect to the impact to the desert tortoise.

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[7] Barrows 2009

[8] Harless et al. 2009; O'Connor et al. 1994

[9] http://www.energy.ca.gov/2010publications/DRECP-1000-2010-008/DRECP-1000-2010-008-F.PDF

[10] Gowan and Berry 2009

[11] http://www.fws.gov/nevada/desert_tortoise/documents/recovery_plan/RRP%20for%20the%20Mojave%20Desert

COMMENT SET B006, CONT.
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B006-18 con

The 1:1 mitigation ratio of desert tortoise habitat outside of critical habitat is inadequate to mitigate for the destruction of this occupied habitat and should be far higher.[12] Mitigation presumes that acquisition will be appropriate tortoise habitat (occupied or unoccupied) which is currently existing and providing benefits to the species, to off-set the elimination of the proposed project site. However, this strategy is still *a net loss of habitat* to the desert tortoise, as currently they are using or could use both the mitigation site and the proposed project site. Therefore, in order to aid in recovery of this declining species, at a minimum a 5:1 mitigation ratio should be required as mitigation for the total elimination of occupied desert tortoise habitat on the proposed project site.

If tortoises are relocated or translocated outside of the DWMA, then the relocation and/or translocation areas need to be secured for tortoise conservation in perpetuity, to preclude moving the animals subsequently if additional projects move forward on the relocation or translocation site(s).

While the DEIS recognizes that impacts from the proposed project will occur to desert tortoise habitat there is no analysis of the significance of those impacts.

B006-19

3. Avifauna

Migratory Birds

The DEIS fails to mention the fatalities that have been documented to occur from birds running into reflective surfaces[13]. Adjacent to the proposed project site are agricultural fields, which also attract birds. The DEIS does not quantify the number of birds (rare, migratory or otherwise) that use/traverse the project site from the (inadequate) 9 days of avian point count surveys (Appendix C.4), nor does it evaluate the impact to birds. McCrary[14] estimated 1.7 birds deaths per week on a 32 ha site with mirrors and a power tower configuration. The proposed project solar site is approximately 525 ha (over 16 times larger). While the proposed solar project is a photovoltaic technology as compared to the mirrors in the McCrary study, other researchers have evaluated impacts to avian species from reflective surfaces and power lines[15] and find significant impacts associated with them. The revised or supplemental DEIS needs to analyze likely impacts to birds from the proposed project and panel configuration based on the point counts.

The failure to provide the baseline data from which to make any impact assessment violates NEPA. This failure to analyze impacts is not only a NEPA violation, but for migratory birds, may also lead to a violation of the Migratory Bird Treaty Act, 16 U.S.C. §§ 703 -711, because migratory birds may be "taken" if the proposed project is constructed.

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[12] Moilanen et al 2009, Norton 2008

[13] McCrary 1986

[14] Ibid

[15] Klem 1990, Erickson et al. 2005

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B006-19 cont.

The *draft* Bird and Bat Conservation Strategy (Appendix C.9) is woefully inadequate. It is little more than a list of best management practices (BMPs) for construction and a list of the proposed mitigation measures. Despite elimination of nesting and foraging habitat for a suite of rare species, no avian or bat specific compensation is proposed and presumed that the compensation for desert tortoise is adequate to off-set impact to these species as well. Clear language requiring that acquired mitigation lands support nesting and foraging habitat for the impacted avian and bat species should be required at a minimum.

Additionally Executive Order 13186 states "Each Federal agency taking actions that have, or are likely to have, a measurable negative effect on migratory bird populations is directed to develop and implement, within 2 years, a Memorandum of Understanding (MOU) with the Fish and Wildlife Service (Service) that shall promote the conservation of migratory bird populations."[16] Furthermore the EO states that goals pursuant to the MOU include "3) prevent or abate the pollution or detrimental alteration of the Environment for the benefit of migratory birds, as practicable;" and "(6) ensure that environmental analyses of Federal actions required by the NEPA or other established environmental review processes evaluate the effects of actions and agency plans on migratory birds, with emphasis on species of concern". Clearly, the supplemental DEIR needs to adequately identify the migratory bird issues on site and evaluate the impact to those species in light of the guidance in Executive Order 13186.

B006-20

Burrowing Owls

The DEIS notes that burrowing owls are located in the proposed project area (DEIS at 4.4-12). Preliminary results from the 2006-7 statewide census identified that the Sonoran desert harbors few Western burrowing owls.[17] Even more worrisome is the documented crash of burrowing owls in their former stronghold in the Imperial Valley. The Imperial Valley has had a recently documented decline of 27% in the past years[18], resulting in an even more dire state for burrowing owls in California. Because burrowing owls are in decline throughout California, and now their "stronghold" is documented to be declining severely, the burrowing owls on this proposed project site (and on other renewable energy projects) become even more important to species conservation efforts. The recirculated or supplemental DEIS needs to evaluate the potential impact of the proposed project on this regional distribution of owls.

While habitat acquisition specifically for burrowing owls as identified in the DEIS, the proposed mitigation of only 6.5 acres per "active burrow" is too low (DEIS at 4.3-18), especially in the Colorado Desert, as it is outdated agency guidance. Mean burrowing owl foraging territories are 242 hectares in size, although foraging territories for owl in heavily cultivated areas is only 35 hectares[19]. Regardless, the acquisition of only19.5 acres (8 hectares) per burrowing owl or pair fails to mitigate for one bird even if it was relying on a heavily cultivated area. Therefore, additional mitigation acreage needs to be required – calculated using the mean foraging territory size times the number of owls. Using the average foraging territory size for mitigation calculations may not accurately predict the carrying capacity and may *overestimate*

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[16] http://ceq.hss.doe.gov/nepa/regs/eos/eo13186.html
[17] IBP 2008, Wilkerson and Seigel 2010
[18] Manning 2009.
[19] USFWS 2003

COMMENT SET B006, CONT.
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B006-20 con

the carrying capacity of the proposed project site, since the proposed project site at 1300 acres – it may be that in this area of the Colorado desert 1300+ acres is necessary to support one burrowing owl. While the DEIS fails to incorporate the guidance from CDFG from 2012[20]. Lastly, because the carrying capacity is tied to habitat quality, language should be included that mitigation lands that are acquired for burrowing owl be native habitats on undisturbed lands, not cultivated lands, which are subject to the whims of land use changes. The long-term persistence of burrowing owls lies in their ability to utilize natural landscapes, not human-created ones.

While "passive relocation" does minimize immediate direct take of burrowing owls, ultimately the burrowing owls' available habitat is reduced, and "relocated" birds are forced to compete for resources with other resident burrowing owls and may move into less suitable habitat, ultimately resulting in "take". While the DEIS proposes to passively relocate burrowing owls, it is unclear if any monitoring targeting "passively relocated" burrowing owl survivorship will occur. The requirements of the plan (Appendix C.9) do not explicitly include long-term monitoring of passively relocated birds in order to evaluate survivorship of passively relocated birds. Additionally no requirement for constructed burrows is identified as mitigation for the destruction of impacted burrows. Other solar projects in the area have been required to construct two burrows for every burrowing owl burrow destroyed.

Golden Eagle

B006-21

The DEIS states that "the entire DHSP project area provides suitable foraging habitat, and is within 10 miles of known golden eagle nesting territories located in the Eagle Mountains, Coxcomb Mountains, and Chuckwalla Mountains. These territories comprise eight golden eagle nests that were inactive in 2010, and one nest where eagle activity was observed but no young were fledged in 2010 (BLM 2011b; see Section 3.4). (DEIS at 4.4-13). However Appendix C.7 Winter Golden Eagle Report indicates that there eight nest sites on which the BLM provided data and an additional nine golden eagle nests on utility poles within the 10-mile radius survey area. It is unclear how territorial boundaries were identified and quantified. Furthermore, the DEIS fails to present exactly how to mitigate the loss of a substantial amount of foraging habitat for the golden eagle from this project and other proposed projects within the territories. The fact still remains that significant amounts of foraging habitat will decrease carrying capacity of the landscape and could result in a potential loss of habitat needed to support a nesting pair, which would impact reproductive capacity.

Scientific literature on this subject is clear - the presence of humans detected by a raptor in its nesting or hunting habitat can be a significant habitat-altering disturbance even if the human is far from an active nest[21]. Regardless of distance, a straight-line view of disturbance affects raptors, and an effective approach to mitigate impacts of disturbance for golden eagles involves calculation of viewsheds using a three-dimensional GIS tool and development of buffers based on the modeling[22]. Golden eagles have also been documented to avoid industrialized areas that are developed in their territory.[23] Additionally, the DEIS does not

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[20] www.dfg.ca.gov/wildlife/nongame/docs/BUOWStaffReport.pdf

[21] Richardson and Miller 1997

[22] Camp et al. 1997, Richardson and Miller 1997

[23] Walker et al. 2005

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actually clearly analyze the impacts to and mitigations for the golden eagle under the Bald Eagle and Golden Eagle Protection Act, which prohibits, except under certain specified conditions, the take, possession, and commerce of such birds.

B006-21 cont.

4. Badger

B006-22

The DEIS states that "American badger dens were recorded on the proposed solar facility site during surveys" (DEIS at 3.4-27) yet the DEIS fails to quantify the number of badgers that would be affected by the proposed project. Literature on the highly territorial badger indicates that badger home territories range from 340 to 1,230 hectares[24]. Therefore, the proposed project could displace *at least* one badger territory. While surveys prior to construction are clearly essential, even passive relocation of badgers into suitable habitat may result "take". Excluding badger from the site is likely to cause badgers to move into existing badger's territory. The recirculated or supplemental DEIS needs to include an actual analysis of impacts to badgers from the proposed project.

5. Cryptobiotic soil crusts and Desert Pavement

B006-23

The proposed project is located in the Mojave Desert Air Quality Management District area, which is already in non-attainment for PM-10 particulate matter[25]. The construction of the proposed project further increases emissions of these types of particles because of the disruption and elimination of potentially thousands of acres of cryptobiotic soil crusts. Cryptobiotic soil crusts are an essential ecological component in arid lands. They are the "glue" that holds surface soil particles together precluding erosion, provide "safe sites" for seed germination, trap and slowly release soil moisture, and provide CO_2 uptake through photosynthesis[26].

The DEIS does not describe the on-site cryptobiotic soil crusts. The proposed project will disturb an unidentified portion of these soil crusts and will likely cause them to lose their capacity to stabilize soils and trap soil moisture. The DEIS fails to provide a map of the soil crusts over the project site, and to present any avoidance or minimization measures. It is unclear how many acres of cryptobiotics soils will be affected by the project. The revised or supplemental DEIS must identify the extent of the cryptobiotic soils on site and analyze the potential impacts to these diminutive, but essential desert ecosystem components as a result of this project.

While desert pavements are mentioned as occurring on the proposed project site (DEIS at 4.9-3), quantitative acreage of pavement are not identified. The impact to air quality from disturbance of desert pavement is not analyzed.

6. Insects

B006-24

The DEIS fails to address insects on the proposed project site. In fact no surveys or evaluation of rare or common insects are included in the DEIS. Desert habitats are notorious for

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[24] Long 1973, Goodrich and Buskirk 1998

[25] http://www.mdaqmd.ca.gov/index.aspx?page=214

[26] Belnap 2003, Belnap et al 2003, Belnap 2006, Belnap et al. 2007

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B006-24 co

supporting endemic insects, typically narrow habitat specialists[27]. The revised or supplemental DEIS must include an analysis of rare insects on the proposed project site. Several papers have been published regarding the impacts of solar panels on invertebrates and ways to potentially avoid those impacts.[28] These issues need to be addressed in a supplemental DEIS.

B006-25

7. Key Minimization, Mitigation and Monitoring Plans Not Provided.

The DEIS references numerous plans that are key to minimizing and mitigating impacts to environmental resources. Appendix C provides three *draft* plans: Desert Tortoise Translocation Plan, Bird and Bat Conservation Strategy and Integrated Weed Management Plan, which may or may not change when they are finalized. Other key plans that are not provided for public review include:

- Habitat Conservation Plan (DEIS at 4.3-3)
- Worker Education and Awareness Program (DEIS at 4.3-3)
- Vegetation Salvage Plan (DEIS at 4.3-4)
- Restoration Plan (DEIS at 4.3-4
- Vegetation Resources Management Plan (DEIS at 4.3-6)
- Compensation Lands management Plan (DEIS at 4.3-24)
- Emory's Crucifixion Thorn Salvage and Relocation Plan (DEIS at 4.3-30)
- Desert Dry Wash Woodland Monitoring and Reporting Plan (DEIS at 4.3-35)
- Construction Water Pond Design (DEIS at 4.4-3)

These plans should be included in the revised or supplemental draft EIS, so that the public and decision-makers can understand what is being proposed to minimize and mitigate the impact to public resources.

B006-26

8. Wildlife Movement Corridor

The DEIS recognizes that "Project construction would further limit connectivity by eliminating movement opportunities across the site for most wildlife species." (DEIS at 4.4-17). However it does not identify minimization or mitigation for this impact. This analysis should be included in the revised or supplemental DEIS

Additionally the whole project site is located within an area identified as an "essential connectivity area"[29] for wildlife identified by the California Essential Habitat Connectivity Project.

B006-27

9. Vegetation and Rare Plants

The DEIS basically mostly relies upon off-site compensation for impacts to vegetation. However also it allows for nesting of mitigation without calling out that the vegetation resources must be present on the compensation lands in order for it to count.

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[27] Dunn 2005

[28] Horvath et al. 2009; Horvath et al 2010

[29] Spencer et al. 2010

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B006-27 cont.

The DEIS fail to analyzed the impact from the proposed project on microphyll woodlands which may be the same as Blue Palo Verde–Ironwood Woodland (Desert Dry Wash Woodland) identified in the DEIS. The Northern and Eastern Colorado (NECO) Plan provides maps of microphyll woodlands and it is unclear how this plant community overlaps with the microphyll woodlands, or the cumulative impact from renewable energy projects and other projects on the microphyll woodlands in the NECO Plan area.

The DEIS proposes to salvage some crucifixion thorn or grow them in a greenhouse and transplanting them out – both unproved strategies. The discovery of these new-to-science occurrences of crucifixion thorn is scientifically important. Many of the existing locations of crucifixion thorn populations are protected as Areas of Critical Environmental Concern (ACEC), due to their regional rarity and their ecological history of being a post-Pleistocene relictual species. The DEIS should include an alternative that provides protection for these occurrences through the designation of an ACEC.

The DEIS fails to adequately evaluate the rare plants, especially the annuals, on the proposed project site, due to a single year survey. Due to the unpredictable precipitation regimes of the desert environs, a project of this size and potential impact would have multiple years of rare plant surveys, not single year "snapshot".

These incomplete data sets preclude evaluation of the impacts, or more importantly the ability to design the project to avoid and minimize impacts. Clearly a supplemental DEIS is required to present these missing data.

10. Failure to Identify Appropriate Mitigation

B006-28

Because the DEIS fails to provide adequate identification and analysis of impacts, inevitably, it also fails to identify adequate mitigation measures for the project's environmental impacts. "Implicit in NEPA's demand that an agency prepare a detailed statement on 'any adverse environmental effects which cannot be avoided should the proposal be implemented,' 42 U.S.C. § 4332(C)(ii), is an understanding that an EIS will discuss the extent to which adverse effects can be avoided." *Methow Valley*, 490 U.S. at 351-52. Because the DEIS does not adequately assess the project's direct, indirect, and cumulative impacts, its analysis of mitigation measures for those impacts is necessarily flawed. The DEIS must discuss mitigation in sufficient detail to ensure that environmental consequences have been fairly evaluated." *Methow Valley*, 490 U.S. at 352; *see also Idaho Sporting Congress*, 137 F.3d at 1151 ("[w]ithout analytical detail to support the proposed mitigation measures, we are not persuaded that they amount to anything more than a 'mere listing' of good management practices"). As the Supreme Court clarified in *Robertson*, 490 U.S. at 352, the "requirement that an EIS contain a detailed discussion of possible mitigation measures flows both from the language of [NEPA] and, more expressly, from CEQ's implementing regulations" and the "omission of a reasonably complete discussion of possible mitigation measures would undermine the 'action forcing' function of NEPA."

Although NEPA does not require that the harms identified actually be mitigated, NEPA does require that an EIS discuss mitigation measures, with "sufficient detail to ensure that environmental consequences have been fairly evaluated" and the purpose of the mitigation discussion is to evaluate whether anticipated environmental impacts *can be avoided. Methow*

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Valley, 490 U.S. at 351-52. As the Ninth Circuit recently noted: "[a] mitigation discussion without at least *some* evaluation of effectiveness is useless in making that determination." *South Fork Band Council of Western Shoshone v. DOI* , 588 F.3d 718 , 727 (9th Cir. 2009) (emphasis in original). B006-28 con

Here, the DEIS does not provide a full analysis of possible mitigation measures to avoid or lessen the impacts of the proposed project and therefore the BLM cannot properly assess the likelihood that such measures would actually avoid the impacts of the proposed project.

D. Impacts to Water Resources— Surface and Groundwater Water Impacts

B006-29

As the DEIS notes, the proposed project will impact a large number of washes and ephemeral streams and is on an alluvial fan. These areas provide important habitat values that will be lost by the construction of the proposed for the project site. The impacts on soils from the proposed project have not been adequately addressed in the DEIS.

The DEIS determined that no US Army Corps of Engineers jurisdictional waters occur on site (Appendix C.11), however, the DEIS failed to evaluate the impact to the Waters of the State which is necessary if the document is to be used in a CEQA process by Riverside County as stated in the document.

Ephemeral and intermittent streams make up over 81% in the arid and semi-arid southwest (Arizona, New Mexico, Nevada, Utah, Colorado and California). These streams provide a variety of ecosystem services including

- landscape hydrologic connections;
- stream energy dissipation during high-water flows to reduce erosion and improve water quality;
- surface and subsurface water storage and exchange;
- ground-water recharge and discharge;
- sediment transport, storage, and deposition to aid in floodplain maintenance and development;
- nutrient storage and cycling;
- wildlife habitat and migration corridors;
- support for vegetation communities to help stabilize stream banks and provide wildlife services;
- and water supply and water-quality filtering[30].

Yet the DEIS fails to evaluate the impact of the proposed project on the ephemeral and intermittent streams and the ecosystem processes that they provide both on and off of the proposed project site. The revised or supplement DEIS will need to include an analysis of these important issues.

Reserved Water Rights: As BLM is well aware, the California Desert Protection Act ("CDPA") expressly reserved water rights for wilderness areas that were created under the act. B006-30

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[30] Levick et al. 2008

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B006-30 cont.

16 U.S.C. §410aaa-76.[31] The CDPA reserved sufficient water to fulfill the purposes of the Act which include to "preserve unrivaled scenic, geologic, and wildlife values associated with these unique natural landscapes," "perpetuate in their natural state significant and diverse ecosystems of the California desert," and "retain and enhance opportunities for scientific research in undisturbed ecosystems." 103 P.L. 433, Sec. 2. The priority date of such reserved water rights is 1994 when the CDPA was enacted. Therefore, at minimum, the BLM must ensure that use of water for the proposed project (and cumulative projects) *over the life of the proposed projects* will not impair those values in the wilderness that depend on water resources (including perennial, seasonal, and ephemeral creeks, springs and seeps as well as any riparian dependent plants and wildlife).

Although no *express* reservation of rights has been made for many of the other public lands in the CDCA, the DEIS should have addressed the federal reserved water rights afforded to the public to protect surface water sources on all public lands affected by the proposed project. Pursuant to Public Water Reserve 107 ("PWR 107"), established by Executive Order in 1926, government agencies cannot authorize activities that will impair the public use of federal reserved water rights.

PWR 107 creates a federal reserved water right in water flows that must be maintained to protect public water uses. *U.S. v. Idaho*, 959 P.2d 449,453 (Idaho, 1998) *cert. denied; Idaho v. U.S.* 526 U.S. 1012 (1999); *Cappaert v. U.S.*, 426 U.S. 128, 145 (1976). PWR 107 applies to reserve water that supports riparian areas, reserve water that provides flow to adjacent creeks and isolated springs that are "nontributary" or which form the headwaters of streams. *U.S. v. City & County of Denver*, 656 P.2d 1, 32 (Colo., 1982). Accordingly, BLM cannot authorize activities that will impair the public use of reserved waters covered by PWR 107.

BLM must examine the federal reserved water rights within the area affected by the proposed project and other proposed and recently approved projects in this area that will use significant amounts of groundwater. This examination must include a survey of the any water sources potentially affected by the proposed project. The BLM must ensure that any springs, seeps, creeks or other water sources on public land and particularly within the wilderness areas are not degraded by the proposed projects' use of water and continue meet the needs of the existing wildlife and native vegetation that depend on those water resources.

PWR 107 also protects the public lands on which protected water sources exist. Accordingly, BLM should not only consider the impact of projects on water sources present on public lands, but also the direct and indirect impacts of the proposed project on the surrounding lands as well as impacts to the ecosystem as a whole.

B006-31

The Center is concerned that the discussion in the DEIS is also incomplete because it fails to address any potential water rights that could arguably be created from use of groundwater by the proposed project on these public lands. While the Center recognizes that this issue may

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[31] The reservation excluded two wilderness areas with regard to Colorado River water. See 103 P.L. 433; 108 Stat. 4471, 1994 Enacted S. 21; 103 Enacted S. 21, SEC. 204. COLORADO RIVER. ("With respect to the Havasu and Imperial wilderness areas designated by subsection 201(a) of this title, no rights to water of the Colorado River are reserved, either expressly, impliedly, or otherwise.")

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B006-31 con

involve somewhat complex legal issues, at minimum, the BLM must address this question and to either require the project proponent to agree that no water rights will be created or to otherwise ensure that any water rights that could *arguably* be created will be conveyed back to the BLM owner and run with the land at the end of the proposed project ROW term. The BLM must provide a mechanism to insure that in no case will the use of water for the proposed project on these public lands result in water rights accruing to the project applicant that it could arguably convey to any third party. Therefore, any water rights *arguably* created by groundwater pumping on these public lands for the proposed project must not ultimately accrue to any third party for use *off-site or on-site* in the future for any other project. Moreover, BLM should ensure that the applicant will not use the groundwater associated with the project off-site for any purpose.

B006-32

E. The DEIS Fails to Adequately Identify, Analyze and Off-set Impacts to Air Quality and GHG Emissions.

Federal courts have squarely held that NEPA requires federal agencies to analyze climate change impacts. *Center for Biological Diversity v. National Highway Traffic Safety Administration*, 508 F.3d 508 (9th Cir. 2007). As most relevant here, NEPA requires consideration of greenhouse gas emissions ("GHG emissions") associated with all projects and, in order to fulfill this requirement the agencies should look at all aspects of the project which may create greenhouse gas emissions including operations, construction, and life-cycle emissions from materials. Where a proposed project will have significant GHG emissions, the agency should identify alternatives and or mitigation measures that will lessen such effects.

As part of the NEPA analysis federal agencies must assess and, wherever possible, quantify or estimate GHG emissions by type and source by analyzing the direct operational impacts of proposed actions. Assessment of direct emissions of GHG from on-site combustion sources is relatively straightforward. For the proposed project, energy consumption for manufacturing, transportation and construction, will be the major source of GHGs. The indirect effects of a project may be more far-reaching and will require careful analysis. Within this category, for example, the BLM should evaluate, GHG and GHG-precursor emissions associated with construction, electricity use, fossil fuel use, water consumption, waste disposal, transportation, the manufacture of building materials (lifecycle analysis), and land conversion. Moreover, because many project may undermine or destroy the value of carbon sinks, including desert soils, projects may have additional indirect effects from reduction in carbon sequestration, therefore both the direct and quantifiable GHG emissions as well as the GHG effects of destruction of carbon sinks should be analyzed.

The discussion of greenhouse gas emissions ("GHG") in the DEIS notes that the solar project will produce GHGs primarily from construction. The GHG emissions from the construction phase of the project are stated to be over 90.6 metric tons CO2 equivalent (Table 4.5-2 Summary of Greenhouse Gas Emissions from On-Site Construction Activity for 2011, Solar Farm Layout B – DEIS at 4.5-3). There is no discussion of reducing these emissions by using more efficient equipment or vehicles.

The DEIS also fails to adequately address other air quality issues including PM10 both during construction and operation which is of particular concern in this area which is a

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B006-32 cont.

nonattainment area for PM10 and ozone. It is clear that extensive on-site grading will result in significant amounts of bare soils and increased PM10 may be introduced into the air by wind and that the use of the area during construction and operations will lead to additional PM10 emissions from the site. Although some mitigation measures are suggested they are not specific and enforceable and because the extent of the impact has not been adequately addressed as an initial matter there is no way to show that the mitigation measures proffered will reduce the impacts to less than significance.

BLM fails to identify any significant GHG emissions and therefore does not provide for avoidance, minimization, or mitigation. BLM has also failed to include the loss of carbon sequestration from soils in its calculations or to provide a lifecycle analysis of GHG emissions that include manufacturing and disposal. Moreover, it is undisputed that in the near-term GHG emissions will increase emissions during construction, and in the manufacturing and transportation of the components. BLM fails to consider any alternatives to the project that would minimize such emissions or to require that these near-term emissions be off set in any way.

Although the proposed project may reduce GHG's overall it will also emit GHGs during construction and due to the manufacturing process that are not accounted for or off-set. BLM completely fails to explore this aspect of the impacts of the project in the DEIS in violation of NEPA.

B006-33

F. The Analysis of Cumulative Impacts in the DEIS Is Inadequate

A cumulative impact is "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time." 40 C.F.R. § 1508.7. The Ninth Circuit requires federal agencies to "catalogue" and provide useful analysis of past, present, and future projects. *City of Carmel-By-The-Sea v. U.S. Dept. of Transp.*, 123 F.3d 1142, 1160 (9th Cir. 1997); *Muckleshoot Indian Tribe v. U.S. Forest Service*, 177 F.3d 800, 809-810 (9th Cir. 1999).

"In determining whether a proposed action will significantly impact the human environment, the agency must consider '[w]hether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment.' 40 C.F.R. § 1508.27(b)(7)." *Oregon Natural Resources Council v. BLM*, 470 F.3d 818, 822-823 (9th Cir. 2006). NEPA requires that cumulative impacts analysis provide "some quantified or detailed information," because "[w]ithout such information, neither courts nor the public . . . can be assured that the Forest Service provided the hard look that it is required to provide." *Neighbors of Cuddy Mountain v. United States Forest Service*, 137 F.3d 1372, 1379 (9th Cir. 1988); *see also id.* ("very general" cumulative impacts information was not hard look required by NEPA). The discussion of future foreseeable actions requires more than a list of the number of acres affected, which is a necessary but not sufficient component of a NEPA analysis; the agency must also consider the actual environmental effects that can be expected from the projects on those acres.

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See Klamath-Siskiyou Wildlands Ctr. v. BLM, 387 F.3d 989, 995-96 (9th Cir. 2004) (finding that the environmental review documents "do not sufficiently identify or discuss the incremental impact that can be expected from each [project], or how those individual impacts might combine or synergistically interact with each other to affect the [] environment. As a result, they do not satisfy the requirements of the NEPA.") Finally, cumulative analysis must be done as early in the environmental review process as possible, it is not appropriate to "defer consideration of cumulative impacts to a future date. 'NEPA requires consideration of the potential impacts of an action *before* the action takes place.'" *Neighbors*, 137 F.3d at 1380 *quoting City of Tenakee Springs v. Clough*, 915 F.2d 1308, 1313 (9th Cir. 1990) (emphasis in original). B006-33 co

The DEIS identifies many of the cumulative projects but does not meaningfully analyze the cumulative impacts to resources in the California desert from the many proposed projects (including renewable energy projects, transmission, and others). Moreover, because the initial identification and analysis of impacts is unfinished, the cumulative impacts analysis cannot be complete. For example, because the identification of potentially occurring rare plants on site is unfinished and incomplete, the cumulative impacts are also therefore inadequate.

The DEIS also fails to consider all reasonably foreseeable impacts in the context of the cumulative impacts analysis. *See Native Ecosystems Council v. Dombek, et al*, 304 F.3d 886 (9th Cir. 2002) (finding future timber sales and related forest road restriction amendments were "reasonably foreseeable cumulative impacts"). The DEIS also fails to provide the needed analysis of how the impacts might combine or synergistically interact to affect the environment in this valley or region. *See Klamath-Siskiyou Wildlands Ctr. v. BLM*, 387 F.3d 989, 995-96 (9th Cir. 2004). B006-34

The NEPA regulations also require that indirect effects including changes to land use patterns and induced growth be analyzed. "Indirect effects," include those that "are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include *growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems*." 40 C.F.R. s.1508.8(b) (emphasis added). *See TOMAC v. Norton*, 240 F. Supp.2d 45, 50-52 (D.D.C. 2003) (finding NEPA review lacking where the agency failed to address secondary growth as it pertained to impacts to groundwater, prime farmland, floodplains and stormwater run-off, wetlands and wildlife and vegetation); *Friends of the Earth v. United States Army Corps of Eng'rs*, 109 F. Supp.2d 30, 43 (D.D.C. 2000) (finding NEPA required analysis of inevitable secondary development that would result from casinos, and the agency failed to adequately consider the cumulative impact of casino construction in the area); *see also Mullin v. Skinner*, 756 F. Supp. 904, 925 (E.D.N.C. 1990) (Agency enjoined from proceeding with bridge project which induced growth in island community until it prepared an adequate EIS identifying and discussing in detail the direct, indirect, and cumulative impacts of and alternatives to the proposed Project); *City of Davis v. Coleman*, 521 F.2d 661 (9th Cir. 1975) (requiring agency to prepare an EIS on effects of proposed freeway interchange on a major interstate highway in an agricultural area and to include a full analysis of both the environmental effects of the exchange itself and of the development potential that it would create). B006-35

COMMENT SET B006, CONT.
CENTER FOR BIOLOGICAL DIVERSITY

B006-35 cont.

Among the cumulative impacts to resources that have not been fully analyzed are impacts to desert tortoise, impacts to sand transport systems and down-wind Mojave fringe-toed lizard habitat, impacts to golden eagles, and impacts to water resources. The cumulative impacts to the resources of the California deserts has not been fully identified or analyzed, and mitigation measures have not been fully analyzed as well.

B006-36

G. The EIS' Alternatives Analysis is Inadequate

NEPA requires that an EIS contain a discussion of the "alternatives to the proposed action." 42 U.S.C. §§ 4332(C)(iii),(E). The discussion of alternatives is at "the heart" of the NEPA process, and is intended to provide a "clear basis for choice among options by the decisionmaker and the public." 40 C.F.R. §1502.14; *Idaho Sporting Congress*, 222 F.3d at 567 (compliance with NEPA's procedures "is not an end in itself . . . [but] it is through NEPA's action forcing procedures that the sweeping policy goals announced in § 101 of NEPA are realized.") (internal citations omitted). NEPA's regulations and Ninth Circuit case law require the agency to "rigorously explore" and objectively evaluate "all reasonable alternatives." 40 C.F.R. § 1502.14(a) (emphasis added); *Envtl. Prot. Info. Ctr. v. U.S. Forest Serv.*, 234 Fed. Appx. 440, 442 (9th Cir. 2007). "The purpose of NEPA's alternatives requirement is to ensure agencies do not undertake projects "without intense consideration of other more ecologically sound courses of action, including shelving the entire project, or of accomplishing the same result by entirely different means."" *Envtl. Defense Fund, Inc. v. U.S. Army Corps of Engrs.*, 492 F.2d 1123, 1135 (5th Cir. 1974). An agency will be found in compliance with NEPA only when "all reasonable alternatives have been considered and an appropriate explanation is provided as to why an alternative was eliminated." *Native Ecosystems Council v. U.S. Forest Serv.*, 428 F.3d 1233, 1246 (9th Cir. 2005); *Bob Marshall Alliance v. Hodel*, 852 F.2d 1223, 1228-1229 (9th Cir. 1988). The courts, in the Ninth Circuit as elsewhere, have consistently held that an agency's failure to consider a reasonable alternative is fatal to an agency's NEPA analysis. *See, e.g., Idaho Conserv. League v. Mumma*, 956 F.2d 1508, 1519-20 (9th Cir. 1992) ("The existence of a viable, but unexamined alternative renders an environmental impact statement inadequate.").

If BLM rejects an alternative from consideration, it must explain why a particular option is not feasible and was therefore eliminated from further consideration. 40 C.F.R. § 1502.14(a). The courts will scrutinize this explanation to ensure that the reasons given are adequately supported by the record. *See Muckleshoot Indian Tribe v. U.S. Forest Service*, 177 F.3d 800, 813-15 (9th Cir. 1999); *Idaho Conserv. League*, 956 F.2d at 1522 (while agencies can use criteria to determine which options to fully evaluate, those criteria are subject to judicial review); *Citizens for a Better Henderson*, 768 F.2d at 1057.

Here, BLM too narrowly construed the project purpose and need such that the DEIS did not consider an adequate range of alternatives to the proposed project. The alternatives analysis is inadequate even with the inclusion of the alternative site configuration and a reduced acreage alternative. Additional feasible alternatives should be considered which would avoid all desert tortoise habitat. In addition, a phased alternative should have been included which could allow some portions of the project that have the fewest impacts to move forward while also affording the project proponent time to find and acquire permits for more appropriate sites for one or more additional phases of the project reconfigured on other BLM lands or on previously degraded

COMMENT SET B006, CONT.
CENTER FOR BIOLOGICAL DIVERSITY

disturbed lands in this area (for example such as the abandoned farmlands in Desert Center) and also to explore other off-site alternatives. B006-36 co

B006-37

The document did not consider a distributed renewable energy alternative. The BLM should have also looked alternative siting on previously degraded lands such as nearby farmlands, distributed solar alternatives, and other alternatives that could avoid impacts of the proposed project as well as impacts of the associated transmission line gen-tie and the new substation. In addition, as discussed above, the BLM should have looked at alternatives for construction and operations that would reduce GHG emissions through offsets or other means.

B006-38

The BLM failed to consider any off-site alternative that would significantly reduce the impacts to biological resources including desert tortoise habitat, key movement corridors, golden eagles, occupied desert kit fox habitat, crucifixion thorn and others. Because such alternatives are feasible, on this basis and other the range of alternatives is inadequate. The Center urges the BLM to revise the DEIS to adequately address a range of feasible alternatives and other issues detailed above and then to re-circulate a revised or supplemental DEIS for public comment.

The existence of these and other feasible but unexplored alternatives shows that the BLM's analysis of alternatives in the DEIS is inadequate.

III. Conclusion

Thank you for your consideration of these comments. In light of the many omissions in the environmental review to date, we urge the BLM to revise and re-circulate the DEIS or prepare a supplemental DEIS before making any decision regarding the proposed plan amendment and right-of-way application. In the event BLM chooses not to revise the DEIS and provide adequate analysis, the BLM should reject the right-of-way application and the plan amendment. Please feel free to contact us if you have any questions about these comments or the documents provided.

Sincerely,

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COMMENT SET B006, CONT.
CENTER FOR BIOLOGICAL DIVERSITY

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COMMENT SET B006, CONT.
CENTER FOR BIOLOGICAL DIVERSITY

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COMMENT SET B007
PEOPLE FOR LAND AND NATURE (PLAN)

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July 13, 2012

Lynette Elser
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Sent Via Email: cadesertharvest@blm.gov

Reference: Comments to Proposed Desert Harvest Solar Swath
Draft EIS And CDCA Plan Amendment

B007-1

Dear Ms. Elser,

These comments are submitted on behalf of Ernest Goitein, member of the Steering Committee of PLAN, Claire Feder and People for Land and Nature (PLAN).

Our comments are based on NEPA's procedural requirements.

BLM – an agency in the executive branch of the Federal Government - has a responsibility to implement NEPA's procedural requirements.

These procedures include the requirement that alternatives to the "Proposed Desert Harvest Solar Swath" project must be considered.

The ability to meet the generating capacity of Desert Harvest by other means must also be evaluated.

Particularly distributed energy generation by solar, wind or small hydro needs to be compared, not only for the obvious environmental advantages, but also on the basis of reliability, and National Security.

The environmental and economic costs of the Desert Harvest Solar Swath project must be evaluated and compared to the environmental and economic advantages and merits of the "No Project" alternative in accordance with the NEPA procedural requirements.

The merits of Solar Photo Voltaic installations closer to load centers, whether on rooftops of homes, shopping centers or small generating facilities in or near cities must be considered as one of the required alternatives.

Comment Set B007, cont.
People for Land and Nature (PLAN)

B007-2

The comparisons should consider the following:

- Transmission losses. The line losses can vary from 6% to 10% of power transmitted. That is a significant amount. These energy losses are converted to heat at the time of maximum insolation and heat in the desert. These transmission losses would not occur with distributed energy located near load centers.

- Corona effect of the high voltage transmission lines will cause
  a bluish light,
  a disturbing crackling noise,
  ozone production and,
  electromagnetic interference – potentially affecting radio and TV signals
  The Corona effect is enhanced by dust that can collect on the conductors, quite likely in the desert location of this transmission line. The Corona Effect would not be experienced with the lower voltages used in distributed energy installations.

- Transmission towers will provide roosting habitat for ravens that prey on the endangered young Desert Tortoises. Desert tortoises would not be affected with distributed energy installations, which are located near load centers.

- The area under the transmission lines must be cleared of trees and other vegetation, extending 150 ft on each side. Ironwood trees, which would be removed, are particularly beneficial. The leaves provide nourishment for bighorn sheep, pronghorn antelope, and mule deer. The seeds are consumed by native doves and quail and rodents and provide shelter for reptiles. The trees can reach the age of 1,500 years. After the removal of vegetation what is left is dust blowing in the wind. Destruction of Ironwood trees and creation of dust sources during wind storms because of a 300 ft wide path cleared under the transmission lines would be avoided with distributed energy installations.

- Sulfur Hexafluoride (SF6) is a greenhouse gas that has a Global Warming Potential (GWP) 23,000 times greater than CO_2. Because of its dielectric properties it is used in high voltage circuit breakers used in the protection of high voltage transmission circuits. Potential leakage can occur in use and during handling, installation, and when damaged. SF6 would not be used in the lower voltages used with distributed energy.

- Clearing the site for the proposed Desert Harvest Solar Project (DHSP) would require the relocation of the endangered Desert Tortoises. Up to 50% of the relocated Desert Tortoises might perish during the relocation. In addition, the Desert Tortoises in the recipient area might also have a high mortality rate due to the competition from the translocated Desert Tortoises. The death of this large number of the endangered Desert Tortoises would not occur with distributed energy facilities.

B007-3

- Effects of construction are many. To name a few:
  Destruction of the Desert Varnish. Desert Varnish helps to sequester CO_2, provides ammonia from atmospheric nitrogen, sustaining and encouraging plant growth, essential for the survival of the endangered Desert Tortoises and the small mammals that have adapted to the desert environment.

COMMENT SET B007, CONT.
PEOPLE FOR LAND AND NATURE (PLAN)

Large labor force requires daily commutes and results in Greenhouse Gas (GHG) releases. B007-3 cont.

Garbage, food refuse, will attract ravens that will also feed on young Desert Tortoises.

Offsite vehicle road trips will leave indelible marks on the desert floor. Tank tracks from General Patton's training ground, dating to the 1940's, are still visible today in the Mojave Desert.

The project will require a batch plant. Aggregate and cement will have to be trucked in. Water needed for the concrete will require wells. This will result in lowering the ground water levels, drying up springs, and depriving adjacent communities of this vital resource.

Off Road Vehicles (ORVs) are likely to be used by the labor force and their families during time off from work, resulting in further destruction of the fragile desert, including Desert Tortoise burrows.

All of these impacts can be avoided if distributed energy is used instead of constructing the proposed DHSP. Therefore the **Distributed Energy Alternative** must be evaluated in detail.

- Vulnerability: The effect of the project's and transmission system exposure to natural disasters (earthquakes, tornadoes, dust storms, hail), vandalism, theft of metals (copper conductors for instance), sabotage, Carrington Effect (solar storms). Distributed energy's exposure is considerably less than this centralized installation and must be evaluated. B007-4

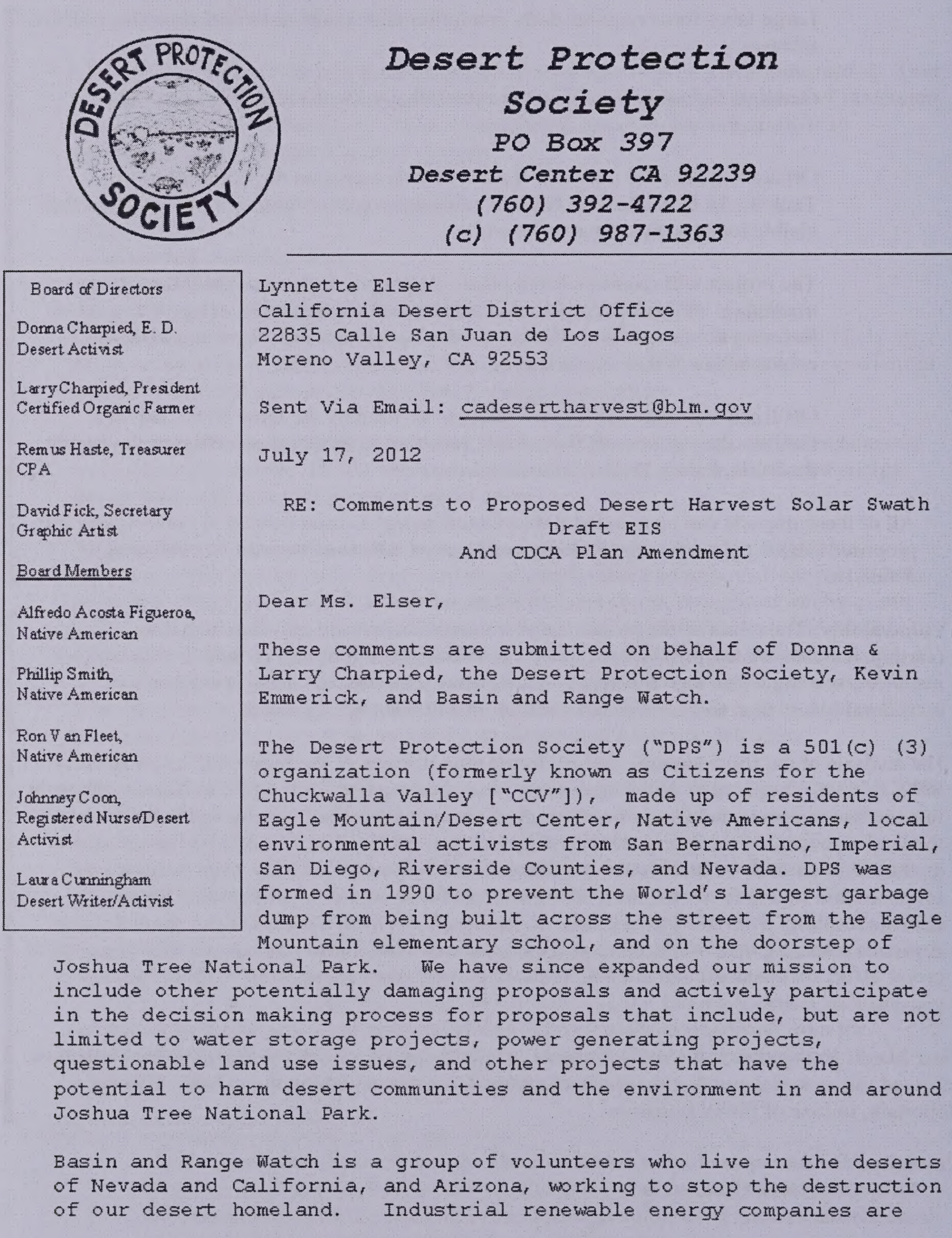
- The analysis of the full economic and environmental impacts of the proposed Desert Harvest Solar Project, compared to distributed energy must be prepared for the DEIS. This comparison must include impacts and costs of construction, maintenance, final closing and restoration of the land at the end of the life cycle with financial guarantees. The cost of a performance and guarantee bond must be included in the comparison, to assure a) that the plant performs as proposed and b) that funds will be available to reimburse adjacent communities for any damage resulting from this project, such as, health effects from increased dust, ground water depletion affecting their wells, damage from increased dust storms, damage to their agricultural crops, effect on life stock and grazing, reduced income due to despoiling of the environment causing a drop in tourism. B007-5

Dear Ms. Elser this concludes my comments. I would appreciate acknowledgment that you have received this material and that these comments will be incorporated in the record. This is important, in case of future litigation.

Cordially,

Ernest Goitein (s)

COMMENT SET B008
DESERT PROTECTION SOCIETY AND BASIN & RANGE WATCH



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July 17, 2012

RE: Comments to Proposed Desert Harvest Solar Swath
Draft EIS
And CDCA Plan Amendment

Dear Ms. Elser,

B008-1 These comments are submitted on behalf of Donna & Larry Charpied, the Desert Protection Society, Kevin Emmerick, and Basin and Range Watch.

The Desert Protection Society ("DPS") is a 501(c) (3) organization (formerly known as Citizens for the Chuckwalla Valley ["CCV"]), made up of residents of Eagle Mountain/Desert Center, Native Americans, local environmental activists from San Bernardino, Imperial, San Diego, Riverside Counties, and Nevada. DPS was formed in 1990 to prevent the World's largest garbage dump from being built across the street from the Eagle Mountain elementary school, and on the doorstep of Joshua Tree National Park. We have since expanded our mission to include other potentially damaging proposals and actively participate in the decision making process for proposals that include, but are not limited to water storage projects, power generating projects, questionable land use issues, and other projects that have the potential to harm desert communities and the environment in and around Joshua Tree National Park.

Basin and Range Watch is a group of volunteers who live in the deserts of Nevada and California, and Arizona, working to stop the destruction of our desert homeland. Industrial renewable energy companies are

COMMENT SET B008, CONT.
DESERT PROTECTION SOCIETY AND BASIN & RANGE WATCH

B008-1 cont.

seeking to develop millions of acres of unspoiled habitat in our region. BRW's objective is to disseminate information to the public to educate them on desert environmental matters. Our goal is to identify the problems of energy sprawl and find solutions that will preserve our natural ecosystems and open spaces. BRW members are artists, biologists, desert activists, farmers, and environmentalists from Nevada, California and, Arizona. BRW website receives up to 10,00 hits per week. http://www.basinandrangewatch.org/

Purpose and Need:
The DEIS states in part,"…Taking into account the BLM's multiple use mandate, the purpose and need for the Proposed Action is to respond to a FLPMA ROW applica-tion submitted by enXco to construct, operate, maintain, and decommission a solar energy-generating facility and associated infrastructure on public lands administered by the BLM in compliance with FLPMA, BLM ROW regulations, and other applicable federal laws and policies. "

DOI's NEPA handbook explains that the "purpose and need statement for an externally generated action must describe the BLM purpose and need, *not an applicant's or external proponent's purpose and need.*" Department of Interior, Bureau of Land Management, National Environmental Policy Act Handbook 35,(citing 40 C.F.R. § 1502.13) (emphasis added), *available at:* (citing 40 C.F.R. § 1502.13) . "The applicant's purpose and need may provide useful background information, but this description must not be confused with the BLM purpose and need for action . . . . It is the BLM purpose and need for action that will dictate the range of alternatives.

The BLM's definition of the project's purpose will necessarily affect the range of alternatives considered, because when "the purpose is to accomplish one thing, it makes no sense to consider the alternative ways by which another thing might be achieved."

B008-2

The DEIS/R fails to consider a reasonable range of alternatives, in violation of NEPA. *Id.* at 20-23. A federal agency may not employ criteria derived from the agency's preferred alternative as a means of rejecting other reasonable alternatives. *Idaho Conservation League v. Mumma*, 956 F.2d 1508, 1522 (9th Cir. 1992). Nor may an agency evade its duty to consider a reasonable range of alternatives by defining its project objectives in unnecessarily narrow terms, in order to artificially restrict the range of alternatives considered. *City of Carmel By-The-Sea v. U.S. Department of Transportation*, 123 F.3d 1142, 1155 (9th Cir. 1997). "The federal courts cannot condone an agency's 'contriv[ing] a purpose so slender as to define competing 'reasonable alternatives' out of consideration.'" *Simmons v. U.S. Army*

COMMENT SET B008, CONT.
DESERT PROTECTION SOCIETY AND BASIN & RANGE WATCH

Corps. of Engineers, 120 F.3d 664, 666 67 (7th Cir. 1997); Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 196 (D.C. Cir. 1991).

B008-2 cont

Alternatives:

OUR PREFERRED ALTERNATIVE would be a No Action Alternative that designates a conservation status to the proposed project site. This alternative would also designate the site inappropriate for solar energy development.

COMMENT SET B008, CONT.
DESERT PROTECTION SOCIETY AND BASIN & RANGE WATCH

B008-3

The Department of the Interior and the State of California are reviewing the Desert Renewable Energy Conservation Plan (DRECP). This plan is an over- all multi-agency future blueprint for public lands management in the California Desert. It will decide which public lands in California would be developed for energy resources and which lands should be protected from development. The entire plan requires Land Use Plan Amendments for the California Desert Conservation Area. The Bureau of Land Management has been considering designating the site of the Imperial 2 Solar Project back into a Limited Use or conservation status under the DRECP. Under Land Use Plan amendments, the BLM can consider new land use designations. The Desert Harvest Right of Way contains significant biological, cultural and visual resources. We would like to request that the BLM considers our Conservation Alternative under the Desert Renewable Energy Conservation Plan.

B008-4

Management, National Environmental Policy Act Handbook 35,(citing 40 C.F.R. § 1502.13) (emphasis added), *available at:* (citing 40 C.F.R. § 1502.13) . "The applicant's

purpose and need may provide useful background information, but this description must not be confused with the BLM purpose and need for action . . . . It is the BLM purpose and need for action that will dictate the range of alternatives.

The BLM's definition of the project's purpose will necessarily affect the range of alternatives considered, because when "the purpose is to accomplish one thing, it makes no sense to consider the alternative ways by which another thing might be achieved."

The DEIS/R fails to consider a reasonable range of alternatives, in violation of NEPA. *Id.* at 20-23. A federal agency may not employ criteria derived from the agency's preferred alternative as a means of rejecting other reasonable alternatives. *Idaho Conservation League v. Mumma*, 956 F.2d 1508, 1522 (9th Cir. 1992). Nor may an agency evade its duty to consider a reasonable range of alternatives by defining its project objectives in unnecessarily narrow terms, in order to artificially restrict the range of alternatives considered. *City of Carmel By-The-Sea v. U.S. Department of Transportation*, 123 F.3d 1142, 1155 (9th Cir. 1997). "The federal courts cannot condone an agency's 'contriv[ing] a purpose so slender as to define competing 'reasonable alternatives' out of consideration.'" *Simmons v. U.S. Army Corps. of Engineers*, 120 F.3d 664, 666 67 (7th Cir. 1997); *Citizens Against Burlington, Inc. v. Busey*, 938 F.2d 190, 196 (D.C. Cir. 1991). A full range of alternatives should be considered in every EIS document. That is required by NEPA. This seems to be one of the biggest problems with most of them.

First, jojoba, a truly green renewable energy source was completely omitted from any discussion in alternatives. Jojoba, a renewable natural resource, was included in the 99th Congress Report 98-109,

COMMENT SET B008, CONT.
DESERT PROTECTION SOCIETY AND BASIN & RANGE WATCH

CRITICAL AGRICULTURAL MATERIALS LIST. The Report states, in part, "...Congress recognizes the need of a domestic industry or industries for the production and manufacture from native agricultural crops of products other than rubber which are of strategic and industrial importance but for which the Nation is now dependent upon foreign sources, that such activities would benefit the economy, the defense, and the general well - being of the Nation, and that additional research efforts in this area should be undertaken or continued and expanded...". Former Congressman Al McCandless (R Palm Springs) was responsible for adding jojoba to the critical agricultural materials list. Jojoba plantings need to be part of the Alternative Actions section of the environmental documents.

Members of DPS are experts in the field and will be happy to provide further information. This plant is native to the area, and the infrastructure is already in place to re-start the industry, thus providing an alternative energy source from the region you desire to develop alternative energy projects.

Over 6,000 acres of jojoba were planted in Desert Center/Eagle Mountain in the early 1980's. The BLM gave away land at $2.50 an acre under the Desert Land Entry Program, which has since been discontinued. Hundreds of acres of Ironwood forests and dry wash woodlands were developed with jojoba, now abandoned. What will be the impacts be to the environment (i.e. soil erosion, flooding etc.) when the remaining ironwood forests and dry wash woodlands are scraped away for solar?

B008-4 cont

Distributed generation in the built environment should be given a full analysis, as it is a completely viable alternative. This project will need just as much dispatchable baseload behind it, and also does not have storage. But environmental costs are negligible with distributed generation, compared with this project. Distributed generation cannot be "done overnight," but neither can large transmission lines (and large solar fields) across hundreds of miles from rural central station plants to load centers. Most importantly, distributed generation will not reduce the natural carbon-storing ability of healthy desert ecosystems, will not disturb biological soil crusts, and will not degrade and fragment habitats of protected, sensitive, and rare species.

Alternatives should be looked at that are in load centers, not closest to the project site. There is a need to consider the "macro" picture, the entire state, to look at maximum efficiency.

B008-5

A master comprehensive plan should exist before large expensive inefficient solar plants are sited and built out in the wildlands. This plan should carefully analyze the recreational and biodiversity resources of the Colorado Desert. A list of assumptions should be included detailing the plan for integrating various fuels mixes and technologies into each utility's plan, an overall state plan, and a national plan. Loads should be carefully analyzed to determine whether additional capacity is needed for peaking, intermediate, or baseload purposes. Unit size, which impacts capital and operating costs and unit capacity factors, has a direct bearing on the relative economics of one technology over another. A plan might recommend that smaller units built in cities and spaced in time offer a less risky solution than one large unit built immediately.

B008-6

COMMENT SET B008, CONT.
DESERT PROTECTION SOCIETY AND BASIN & RANGE WATCH

B008-6 cont.

Right now there is no utility plan, no state plan, and no national plan. Large-scale central station energy projects have been sited very far from load centers out in rural deserts, with the only criterion being nearness to existing transmission lines and natural gas lines. Very little thought has been given to the richness of biological resources, the cumulative impacts on visual scenery to tourists, the proximity to ratepayers, or the level of disturbance of the site.

The California Energy Commission says they will be a need to build many new efficient natural gas peaker or baseload plants to back up the renewable projects planned. Instead, the renewables should be distributed generation in load centers, which will provide much more efficiency, rather than inefficient remote central station plants that reduce biodiversity and require expensive transmission lines. This reduces the risk, as distributed generation is a known technology and has been proven in countries like Germany where incentive programs have been tested. Incentive programs can be designed in an intelligent manner to vastly increase distributed generation. Incentives for large remote projects are unproven to lower risk and may actually raise debt levels with runaway costs associated with poor sighting and higher-than-anticipated operating and maintenance costs.

Many renewable project developers have failed to consider reasonable or viable alternatives that could serve as solutions that everybody could live with. In the case of this particular project, conflicts with local residents, endangered species, cultural resources, storm water drainage erosion, viewscapes from National Parks and wilderness areas could all be avoided with a distributed generation alternative.

B008-7

Water:
"In addition to the direct impacts to vegetation, project construction would have several indirect impacts to native vegetation, special-status plants, and jurisdictional streambeds off site, including introduction or spread of invasive weeds and, potentially, ***depletion of ground water*** and diversion of surface water flows and subsequent effects to groundwater-dependent vegetation." (emphasis added)

The weather history for Eagle Mountain gathered at the Metropolitan Water District from 1933 - 2011 shows very, very little rainfall see: (http://weatherwarehouse.com/WeatherHistory/PastWeatherData_EagleMtn_DesertCenter_CA_January.html).
In fact, from 1990 to 2011 there are a four year drought and a 9 year drought. That means no recharge from precipitation.

Your precipitation records are from over 50 miles away, in Blythe.

USGS conducted a study in the Chuckwalla Valley, Groundwater Ambient Monitoring Analyzing or "GAMA", which provided age dating for the area. In a personal conversation with Mr. Michael Wright, USGS, we learned that they examined wells in Desert Center and determined the water is "very,

COMMENT SET B008, CONT.
DESERT PROTECTION SOCIETY AND BASIN & RANGE WATCH

B008-7 cont

very old", thousands of years old. He explained if tritium is not detected there has been no recharge for the past 50 years, which is a commonly accepted hydrological fact. Why didn't the EIS do tritium analysis? Also, C14 will tell exactly how old the water is, but the EIS did no such analysis. http://pubs.usgs.gov/ds/659/ - this is the link to the GAMA study.

Nowhere in the DEIS can we determine where water for this project will come from. Are you going to drill a well? Truck in water from elsewhere? Or, try to purchase water from neighboring Desert Sunlight solar project? The Final EIS must detail how much water will be used during the entire construction (including use by employees), as well as where the water will be coming from.

We do know water will not be from Lake Tamarisk, or shouldn't, to wit, the DEIS states in part, "...**4.3 Is there a public water system that will serve the proposed project?**

United States Code Title 42 Section 300f(4) describes that the term "public water system" refers to a system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least fifteen service connections or regularly serves at least twenty five individuals (42 U.S.C. Sec. 300f(4)). The proposed DHSP would not be serviced by a public water system. As described in Section 2, water required during construction and operation of the project would be obtained from groundwater well(s) located on- and/or off-site, and would pump water from the CVGB.

B008-8

Something must be in place to protect private well owners in the area. Desert Sunlight quarterly monitors 4 wells on the undersign's property. Three monitoring wells installed by the hydro-electric company in the 1990's and our irrigation well. To date, we have experienced one third of a foot drop in our water level. You may dismiss this as insignificant. However, when considered with the subject project, Desert Sunlight, the hydroelectric project, and other foreseeable projects in this small area, it becomes significant. We have only about 40 feet until we reach the bottom of our well. Once the table drops that low, we are out of water and business - The Charpied's have owned and operated a certified organic jojoba farm, north of your proposed project.

B008-9

As BLM is well aware, the California Desert Protection Act ("CDPA") expressly reserved water rights for wilderness areas that were created under the act. The CDPA reserved sufficient water to fulfill the purposes of the Act which include to "preserve unrivaled scenic, geologic, and wildlife values associated with these unique natural landscapes," "perpetuate in their natural state significant and diverse ecosystems of the California desert," and "retain and enhance opportunities for scientific research in undisturbed ecosystems." 103 P.L. 433, Sec. 2. The priority date of such reserved water rights is 1994 when the CDPA was enacted. Therefore, at minimum, the BLM must ensure that use of water for the proposed project (and cumulative

COMMENT SET B008, CONT.
DESERT PROTECTION SOCIETY AND BASIN & RANGE WATCH

B008-9 cont.

projects) over the life of *the proposed projects* will not impair those values in the wilderness that depend on water resources (including perennial, seasonal, and ephemeral creeks, springs and seeps as well as any riparian dependent plants and wildlife). involve somewhat complex legal issues, at minimum, the BLM must address this question and to either require the project proponent to agree that no water rights will be created or to otherwise ensure that any water rights that could arguably be created will be conveyed back to the BLM owner and run with the land at the end of the proposed project ROW term. The BLM must provide a mechanism to insure that in no case will the use of water for the proposed project on these public lands result in water rights accruing to the project applicant that it could arguably convey to any third party. Therefore, any water rights *arguably* created by groundwater pumping on these public lands for the proposed project must not ultimately accrue to any third party for use off-site or on-site in the future for any other project. Moreover, BLM should ensure that the applicant will not use the groundwater associated with the project off-site for any purpose.

Further, the DEIS states, in part, "…4.3 Is there a public water system that will serve the proposed project? United States Code Title 42 Section 300f(4) describes that the term "public water system" refers to a system for the provision to the public of water for human consumption through pipes or other constructed conveyances, if such system has at least fifteen service connections or regularly serves at least twenty five individuals (42 U.S.C. *Sec.* 300f(4)). The proposed DHSP would not be serviced by a public water system. As described in Section 2, water required during construction and operation of the project would be obtained from groundwater well(s) located on- and/or off-site, and would pump water from the CVGB.

B008-10

Greenhouse Gases and Climate Change:
The FEIS should quantify the amount of GHG used for construction. How many pounds/tons of fossil fuel will be used? How much fossil fuel will vehicles use for construction, commuters to work, etc? Multiply these factors by a 30 year lifespan of the project.

Transmission line upgrades and new transmission facilities may increase the use of the green house gas called SF6 which is used primarily in electricity transmission - and is emitted in especially large amounts in construction of new lines - and is 24,000 times as potent as CO2 in its global warming impacts. The Environmental Protection Agency has declared "that the electric power industry uses roughly 80% of all SF6 produced worldwide". Ideally, none of this gas would be emitted into the atmosphere. In reality significant leaks occur from aging equipment, and gas losses occur during equipment maintenance and servicing. With a global warming potential 23,900 times greater than CO2 and an atmospheric life of 3,200, one pound of SF6 has the same global warming impact of 11 tons of CO2. In 2002,

COMMENT SET B008, CONT.
DESERT PROTECTION SOCIETY AND BASIN & RANGE WATCH

B008-10 con

U.S. SF6 emissions from the electric power industry were estimated to be 14.9 Tg CO2 Eq. …

http://www.epa.gov/electricpower-sf6/basic.html

Please provide a more detailed analysis of the amount of SF6 gases that would be released by this project, other than saying "it won't be much".

Will commuters be driving gas powered vehicles to and from work in a rural area for the next 30 years or however long the lifespan of the project is? How much green house gas is this? The Ivanpah Solar Electric Generating System is undergoing construction at this time. Approximately 250 vehicles commute to and from work every day from distances as far as Barstow, California.

Carbon Sequestration and removal of plants, caliche layers and biological soil crust would all be removed for this project. The DEIS should address the potential impacts of removal of these features. Will the new energy plant actually increase greenhouse gases?

Trampling arid soils promotes climate change. This summer a panel of scientist will convene during the Ecological Society of America to educate the masses on cryptobiotic soils.

Bettina Weber , Biology, Plant Ecology and Systematics, University of Kaiserslautern, Kaiserslautern, Germany offers research conducted, "*Biological crusts: A forgotten component of the global carbon and nitrogen cycle?*" :

B008-11

Background/Question/Methods

Cryptogamic covers are composed of cyanobacteria, green algae, lichens, bryophytes, fungi and bacteria in varying proportions. As cryptogamic ground covers, including biological soil and rock crusts as well as bryophyte and lichen carpets they occur on many terrestrial ground surfaces. Cryptogamic plant covers, comprising epiphytic and epiphyllic crusts as well as foliose or fruticose lichens and bryophytes are spreading over large portions of terrestrial plant surfaces. Photoautotrophic organisms within these crusts sequester atmospheric CO2 and many of them inhabit nitrogen-fixing cyanobacteria, utilizing atmospheric N2 to form ammonium which can be readily used by vascular plants. In a thorough literature search, we compiled all available data on the photosynthetic properties of cryptogamic covers and developed a model to calculate their net primary production.

In a detailed long-term study, the net primary production of biological soil crusts (BSC) is analyzed.

COMMENT SET B008, CONT.
DESERT PROTECTION SOCIETY AND BASIN & RANGE WATCH

B008-11 cont.

Results/Conclusions

We obtained a total value of 3.9 Pg a-1 for the global net uptake of carbon by cryptogamic covers, which corresponds to approximately 7% of the estimated global net primary production of terrestrial vegetation (Elbert et al., in press). This value is of the same magnitude as the global annual carbon turnover due to biomass burning, which has been estimated at 3.6 Pg a-1. The corresponding study on the nitrogen assimilation of cryptogamic covers revealed a global estimate of ~49 Tg a-1, accounting for as much as half the estimated total terrestrial biological nitrogen fixation.

In the long-term study, the microclimatic conditions (water status, temperature, light intensity) of four different types of BSC have been monitored over one whole year. These data reveal that BSC are active for a total duration of approximately 35 days during the year, experiencing mean temperatures of only 14.6°C in an active state. Microclimate data are combined with ecophysiological characterizations of the four crust types to obtain their annual balance of net primary production. Calculation of the net primary production on a spatial scale is being accomplished in a remote sensing approach. Based on hyperspectral remote sensing data we have developed an algorithm to classify biological soil crusts of the Succulent Karoo. Knowing the percentage of each crust type, we depict and calculate the long-term productivity of each crust type with high accuracy.

Literature:

Elbert W, Weber B, Burrows S, Steinkamp J, Büdel B, Andreae MO, Pöschl U (in press). Contribution of cryptogamic coverst to the global cycles of carbon and nitrogen. Nature Geoscience.

More research may be found at:
http://eco.confex.com/eco/2011/webprogrampreliminary/Paper32350.html

B008-12

Problems associated with hundreds of workers:
Construction of this project would bring hundreds of new people to the area, added to the 300-400 employees working at Desert Sunlight. With these people may come law enforcement problems. These problems may include illegal off-roading, vandalism to private property, harassment of wildlife and other undesired behavior. More on this below.

Noise:
Local residents will be subjected to a constant hum from transformers that will be created for the Project, as well as the squeal of tracking panels. The desert is an extremely quite place, that is why many urbanites flock to the desert - for quiet, peace, and solitude. The noise created by the Project will be akin to torture.

COMMENT SET B008, CONT.
DESERT PROTECTION SOCIETY AND BASIN & RANGE WATCH

Psychologists and psychiatrists have documented the mental stress on people who live next to windmills, that also produce a constant hum. B008-12 co

The tracking component of the system will disrupt the peace and quiet in our community and significantly impact the Wilderness Experience for hikers in nearby Joshua Tree National Park Wilderness.

Construction noise from Desert Sunlight is sometimes unbearable. The noise will be compounded if this project gains approval. Construction times should run from 6:00am to 6:00pm, and absolutely zero construction at night time!

What kinds of mitigations are in place to protect public health and safety from low frequency and infrasonic noise that will be created by the transformers throughout the 1,000+ acre solar swath, along with the 4,000 acre Desert Sunlight project? People who normally had quiet nights will not be able to sleep, which creates mental problems from agitation to full blown psychosis due to lack of sleep. These are common symptoms with people who have amnesia or who take drugs, such a methamphetamines. The applicants claim that the noise will not be noticeable. They need to camp out on their land to see and hear what it is like now. Noise travels well in the desert. For example, the developers of the Chuckwalla Valley Raceway, about 16 miles away from the Project site can be heard in the morning. Those developers also claimed nobody would hear them.

Electromagnetic Field

Sam Milham, MD,MPH has written a book "Dirty Electricty – Electrification and the Diseases of Civilization" where he details illnesses from electromagnetic fields, telephones, televisions, and other electrical devises. This book does for electromagnetic fields what "Silent Spring" did for pesticides. Dr. Milham is a physician-epidemiologist specializing in public health. He has more than 100 scientific publications, many dealing with the health effects of electricity. In 1997 Dr. Milham was awarded the Ramazzini prize for his pioneering work in describing the occupational cancer risks of electromagnetic fields. Dr. Milham has discovered that most twentieth century diseases of civilization, including cancer, cardiovascular disease, diabetes, and suicide are caused by electromagnetic field exposure. See http://sammilham.com/index.shtm for more information on Dr. Milham, and his research. B008-13

Dr. Milham traveled to the Charpied farm in April 2012, to obtain "dirty electricity" readings from our home, office, and outdoors for baseline information. He will be back to perform some more readings once the Desert Sunlight project goes on line.

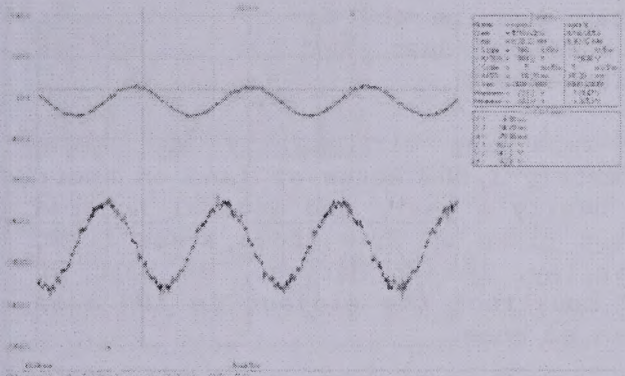
The readings inside our home were good – inside the safe level for such things. The readings in our office were a bit high, but that was

COMMENT SET B008, CONT.
DESERT PROTECTION SOCIETY AND BASIN & RANGE WATCH

B008-13 cont.

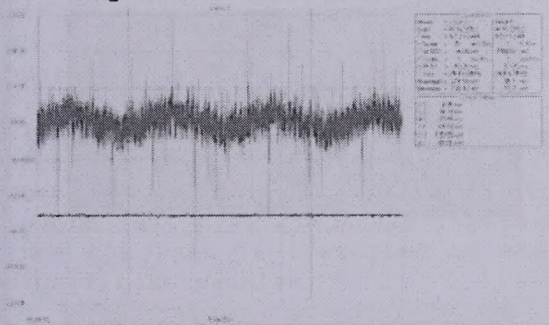
due to using a dact telephone, which has been replaced, and the numbers decreased significantly.

The readings he obtained outside were off the charts! Dr. Milham performed test of the air, and the ground. He believed the high ratings were from the transmission lines to the north of us. This is particularly disturbing because WE ARE FARMERS WHO WORK OUTSIDE !!! Once Desert Sunlight is fired up, combined with this project and I say, why don't you just come out here and put a bullet in our head – it will be quicker and less painful. Below dirty electricity reading in our home:

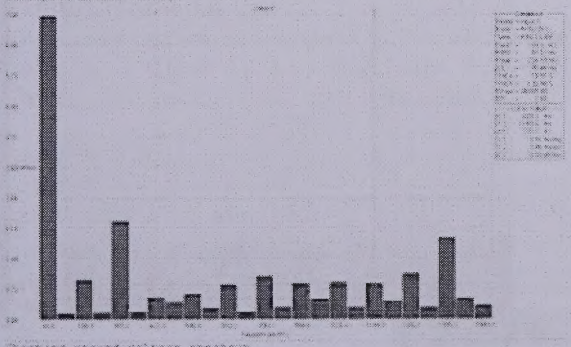


Charpied kitchen outlet 06-30

Readings from outdoors:



Charpied ground voltage



Charpied ground voltage spectrum

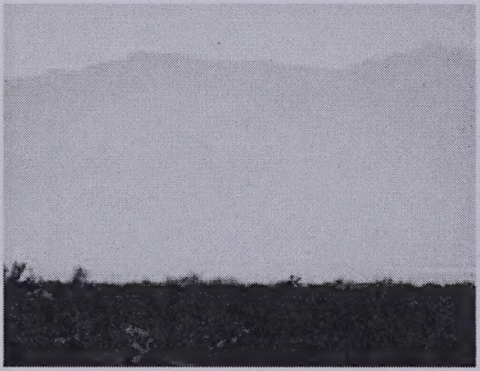
COMMENT SET B008, CONT.
DESERT PROTECTION SOCIETY AND BASIN & RANGE WATCH

B008-14

Dust:
Members of DPS have lived and farmed in Desert Center/Eagle Mountain for over 35 years. During that time, we experienced an outrageously beautiful viewshed of Joshua Tree National Park Wilderness and surrounding undisturbed desert where Desert Sunlight is now, and where Desert Harvest may be built. Our skies were crystal clear most of the year, with a handful of dust storms occurring that completely engulfed the Valley.

Today, we cannot even count the number of times dust engulfed our community from the construction of Desert Sunlight. Except after a rare rain event, there is constantly dust in the air. First Solar uses palliatives and water to suppress the dust, and in fairness do they best that they can, but it is inadequate.

One reason dust is significantly impacting air quality and human health is that they cleared approximately 1,000 acres of land on their southeast that has sat denuded for nearly a year, and several hundred acres for storage in the north. Dust picks up from those areas first and gains momentum engulfing the valley. Desert Harvest, as part of mitigation for dust control, ***MUST construct the project in 100 acre chunks, and not clear the entire area at once.***

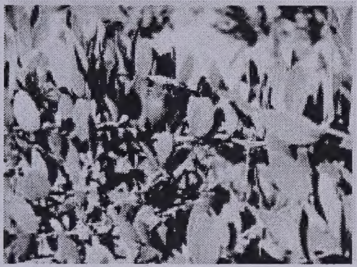


COMMENT SET B008, CONT.
DESERT PROTECTION SOCIETY AND BASIN & RANGE WATCH

B008-14 cont.

The above are just a few images taken from November 2011 - April 2012.

Desert Harvest must install air quality monitoring stations that collects data on PM10, PM2.5, arsenic, diesel, and other constituents of concern **prior to construction!**



Further, the Charpied jojoba farm will become an endangered species if this project is approved. Jojoba is a wind pollinated plant. During pollination times, cultural practices are such that no tractor work or any dust creating equipment is used. When the styles are exposed on the female plant for pollination, it creates a sticky substance to ensure it catches pollen. If dust happens to fall on the style, the flower ceases creating the sticky substance because it thinks it has been pollinated. The result is aborted seeds, i.e. empty seed capsules. During construction and throughout the life of the project, the jojoba farm is threatened with no production. What government agency oversees the regulation for taking of people's livelihoods? There will be a huge significant impact to the jojoba if this project goes forward. BLM will undoubtedly have a tort claim against them if this project is approved and yields from the crop decrease due to insects introduced due to the project. The above image is of aborted seed from dust created from Desert Sunlight. Growing conditions for jojoba were spectacular for jojoba in 2012. The temperatures were perfect - no freezes and no unseasonably hot weather. **We lost 50% of our crop to dust.** Will this loss become exponentially greater if this white elephant is built?

Where in the BLM regs does it say it okay to "take" a 30 year old business with impunity? More on dust below.

Blowing dust from employees going to and fro, along with equipment trucks, trash trucks, and general construction will cause a lot of dust. Dust is also is a problem for
jojoba (all plants actually) because it carries with it, spider mites. Once the land is disturbed by the project, dust (PM10) will become a significant problem.

B08-15

Visual Impacts
The preferred alternative would have 15 foot tall single axis tracking panels. Clearly the BLM and DOI have zero respect for Joshua Tree National Park, nor the residents of this community.

Desert Sunlight's panels are around 4 - 5 feet in height, with a fraction of project constructed, and the

COMMENT SET B008, CONT.
DESERT PROTECTION SOCIETY AND BASIN & RANGE WATCH

B008-15 con

glare is already overwhelming. Your panels will be following the sun that will be like someone shining a mirror in your eyes all day long. This is unacceptable !

Visitors travel to wilderness areas of our Park System for the peace, open space, to reflect (no pun intended), and to for the moment, escape the externalities of society. Imagine hiking the wilderness in the Eagle Mountains then with your hands on your hips, taking a deep breath of fresh air, slowly turn around to view the vastness, then **WHAM!** a sea of bright mirrors reflecting on you. Again, the wilderness experience is impacted.

Further as mitigation for visual impacts, as well as protection of smaller species from Ravens and other raptors, Desert Harvest must install all transmission wires within the project under ground. Much to First Solars' credit, they have agreed to place 90% of their electrical transmission lines underground, and their project is three times the size of yours. If that is too costly for you, then you simply do not have the finances to build it.

B008-16

Housing

The DEIR/S states there will be around 400 people during construction. Where are these people going to live? There is no housing in Desert Center/Eagle Mountain/Lake Tamarisk that could accommodate such an influx of people. There aren't even 400 permanent residents in the area, so this will double our population, quadruple taking Desert Sunlight into account. Are they going to set up tents on the project site? Do they plan to commute? If they plan to commute, will where they park their cars? On
the side of Kaiser Road, blocking traffic and visibility? What air quality impacts can be expected from all this travel from at a minimum 50 miles away? What impact will that have on GW, albeit temporary, there are so many areas where this project produces more CO2 than it offsets.

B008-17

Law Enforcement

What will the impact be on law enforcement with this influx of construction workers, who have the reputation of being quite rowdy? The nearest Sheriff station is 50 miles to the east in Blythe or 50 miles to the west in Indio. How will this area not turn into a lawless, haven for illegal activity? What would the economic impact be to law enforcement's resources having to drive 50 miles one way to answer a call?

Also, there are no doctors, hospitals, or urgent care centers here. What is the plan if something goes terribly wrong and people are seriously injured?

COMMENT SET B008, CONT.
DESERT PROTECTION SOCIETY AND BASIN & RANGE WATCH

B008-17 cont.

Among the illegal activities construction workers engage in is off roading. Do you plan to educate your employees on off roading issues? Surely once people become familiar with the area they will explore more and very easily end up inside Joshua Tree's Wilderness. This problem is nearly non-existent currently. A large percentage of construction workers own off road vehicles and very few obey the road rules. What will be the impact to Joshua Tree National Park when these people decide to recreate in the desert when the work day is over? Active Golden Eagle nests were located in the Coxcomb mountains, which is Joshua Tree National Park Wilderness. What impact would these activities have on the Golden Eagle, Desert Tortoise, vegetation, etc?

Fire Response

B008-18

This project is located virtually in the middle of nowhere. What contingencies are in place if (when) there is some kind of short in the lines, or other reasonable scenario that would cause the solar swath to start on fire? Although there is a County Fire Station located in Lake Tamarisk, about 5 miles south of the project, it is not equipped for large industrial fires. There are no fire hydrants anywhere nearby. The fire trucks would have to drive approximately 10 miles (5 miles each way) to fill the truck with water from one of the man-made lakes at Lake Tamarisk. How does Desert Harvest plan for the worse case fire scenario? Perhaps a mitigation would be to construct another firehouse closer to the site, with a source of water.

Aggregate and Rip-Rap:

B008-19

The DEIR/S states that aggregate for roads and rip-rap for flood control will be implemented. Will this be obtained on-site or from some other source? First, there needs to be analysis that include impacts of significance, mitigation, and a cumulative impact analysis. If you are going to mine the subject R-O-W for aggregate for the project the impact to air, groundwater quality/quantity, noise, wildlife, lighting, etc all must be analyzed. If mining of aggregate is to be a part of this project Cal OSHA, the Department of Mine Reclamation, and other agencies who oversee/permit mining operations must be contacted for their input/comments/recommendations.

Do you plan to obtain aggregate/rip-rap from Kaiser, which the DEIS states is inoperative, the DEIR/S did not discuss cumulative impacts with Kaiser restarting their abandoned mining operations. Kaiser currently cannot legally mine the defunct Eagle Mountain mine because they had to cease mining when they went bankrupt due to the uneconomical status of the mine. The reclamation plan was adopted in the dumps EIR when the County of Riverside certified the document in 1997. Further, Kaiser had to relinquish all of its permits and abandon mining because of the proposed dump. Kaiser has no legal way of mining or providing Desert

COMMENT SET B008, CONT.
DESERT PROTECTION SOCIETY AND BASIN & RANGE WATCH

B008-19 co

Harvest with gravel or rip-rap, from their closed mine.

Furthermore, the State Department of Conservation have sent Riverside County and Kaiser a 15-Day Notice that states, in part, that they consider the old mine abandoned.

If Desert Harvest and Kaiser decide to do business together, then a full analysis of restarting mining operations, on the doorstep of Joshua Tree National Park must be conducted. The analysis must include but not limited to analysis of the cumulative impacts on traffic, road deterioration (remember there is only ONE road to the proposed project and the defunct mine). Kaiser will need to obtain all necessary permits, and withdraw its applications for the world's largest garbage dump. Additionally, analysis of the material taken from the defunct mine must be analyzed for toxins, prior to Desert Harvest using it for construction of their project. The FEIR/S must discuss activities at the defunct mine. To satisfy NEPA/CEQA requirements analysis of all past, current and foreseeable future activities must be conducted.

Lastly regarding the abandoned Kaiser mine and other lands in the Eagle Mountains comprising a total of 29,775 acres should be restored to Joshua Tree National Park. To that end the Desert Protection Society and the Center for Community Action and Environmental Justice launched the Give It Back! Campaign.

This campaign is the answer to the economic blight the local community of Eagle Mountain and Desert Center have lived with since Kaiser Steel went bankrupt in 1983. The vision we have for the community is far different than the vision of our elected officials and developers. We look at the old mine and see a historical site. We look at the boarded up houses and see wilderness huts.

The campaign is petitioning members of Congress, and local and state legislators to authorize the 29,775 acres of land, once part of the park but set aside by Congress in the 1950s for mineral exploration, to be returned to the National Park Service. Activists are concerned that the development of the world's largest garbage dump, proposed on these lands, would be detrimental to the health of the community and the national park. The campaign proposes instead that the land be managed by the Park Service to attract tourism to the area.

Returning the land is not only important for protecting the park, it is called for by law. The first law, a Congressional Act of 1950, Public Law 837 ("PL 837"), omitted 265,340 acres from Joshua Tree National Monument for mineral extraction. Prior to omitting the land, the President of the United States ordered the land surveyed to "determine to what extent said area is more valuable for minerals than for National Monument purposes…". An explicit provision in PL 837 states if the land is not used for mineral purposes it should be returned to Joshua Tree.

COMMENT SET B008, CONT.
DESERT PROTECTION SOCIETY AND BASIN & RANGE WATCH

B008-19 cont.

A second law, passed in 1952, also supports returning this land to Joshua Tree. Through Private Law 790 ("PL 790"), Congress granted the Kaiser Steel Corporation rights-of-way and land in the Eagle Mountains for campsite and millsite purposes to "promote the development of steel in the West by facilitating the mining operations of the Kaiser Steel Corporation" (House Report 1853). When PL 790 was enacted, Congress explicitly stated "…**said property shall revert in fee to the United States in the event that said property is not used for a continuous period of seven years as a camp site or mill site or for other incidental purposes in connection with mining operations of said corporation or its successors in interest"** (emphasis added). Kaiser has not mined this property since 1983, and has leased the property to Mine Reclamation Corporation to develop the world's largest garbage dump, which is not related to mining. Thus, the "Give It Back" campaign seeks for the federal government to enforce PL 790 and alleviate Joshua Tree National Park from the threat of the Eagle Mountain dump, hydro-electric project, future mining, and any other questionable land use industry and government can think of.

NPCA released a report in 2003, which showed that California's national parks are a financial boon to local communities. Based on a conservative economic model developed by Michigan State University, the NPCA report showed that the 1.3 million visitors to Joshua Tree in 2001 contributed $46.3 million to local economies, supporting 1,115 jobs and $21.9 million in income and employee benefits in the region.

The acres of land omitted from Joshua Tree in 1950, including land slated for the dump, must be returned to the park or the results will be the death of one of our nation's premier parks and intolerable pollution to community residents.

As you know this area is targeted with vast industrialization, on a scale never seen before in this pristine desert. We all have a chance to "save" a righteous part of this area in perpetuity.

The BLM and DOI have to balance the scales of industrialization and conservation (a little Environmental Justice is warranted here!), and this could happen by restoring the 29,775 acres of lands in the Eagle Mountains to Joshua Tree National Park. This can be easily achieved since MRC, the dump applicant went bankrupt in 2011. No legislation would be required as the DOI would simply transfer administration of said lands from BLM to NPS.

B008-20

Environmental Justice:

Environmental Justice is …the confluence of social and environmental movements, which deals with the inequitable environmental burden born by groups such as racial minorities, women, poor, or residents of rural areas and developing nations. It is a holistic effort that seeks to analyze and overcome the power structures that have targeted these groups and thwarted environmental reforms. Environmental justice proponents generally view the environment as encompassing

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DESERT PROTECTION SOCIETY AND BASIN & RANGE WATCH

'where we live, work, and play' (sometimes adding learn and pray). The movement seeks to redress inequitable distributions of environmental burdens (pollution, industrial facilities, crime, etc.) and access to environmental goods (nutritious food, clean air & water, parks, recreation, health care, education, transportation, safe jobs, etc.) in a variety of situations. B008-20 con

In 1984, a report by Cerrell and Associates, commissioned by the California Waste Management Board outlined the communities most vulnerable and therefore easiest to site polluting facilities near, outlined those communities we refer to as Environmental Justice Communities. The report suggested that the Waste Board should… "target communities with less than 25,000 people, and where the residents are old, poor, politically conservative and Roman Catholic." That description certainly applies to the Eagle Mountain, Desert Center, and Lake Tamarisk communities where this project is proposed. The report goes on to state, "All socioeconomic groupings tend to resent the nearby siting of major facilities, but the middle and upper socioeconomic strata possess better resources to effectuate their opposition."

Energy laws before Congress aren't taking into account the economic realities of working people. Proposals such as Cap-and-Trade would target coal-intensive states, home to millions of America's working families and low-wage earners. Regardless of the environmental reasoning, such proposals would cause the price of electricity to rise drastically.

Renewable Energy proposals raise the same challenge. Many states are ill-equipped to take advantage of renewable energy sources such as solar and wind in an affordable way. In these states, working people will be forced to pay higher energy bills due to federal penalties assessed to energy producers and passed on to customers.

Research shows that higher energy prices have a greater impact as income decreases. This means that the most economically vulnerable Americans will suffer disproportionately. This is neither morally just nor politically fair.

Biological Resources:

Desert Tortoise (*Gopherus agassizii*) B008-21

The proposed project site will remove 1,200 acres of a connectivity corridor of desert tortoise habitat. The site represents a linkage between the Fish and Wildlife Service designated Colorado Recovery Unit and the West Mojave Recovery Unit. It also represents an important connectivity habitat between the Chuckwalla Desert Wildlife Management Area (DWMA)/Critical Habitat and the Joshua Tree Desert Wildlife Management Area/Critical Habitat. The revised recovery plan

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also makes the following statement concerning the importance of gene-flow in Recovery Units: B008-21 cont.

"*(a) Genetic variation. Gene flow is the result of dispersal accompanied by successful reproduction and incorporation of genes in a population. Ultimately, gene flow governs the amount of genetic connectivity among populations. A lack of gene flow will allow populations to differentiate over time by means of genetic drift and natural selection. Desert tortoises possess characteristics that potentially allow for high levels of gene flow among populations. For example, individuals have the ability to move long distances (Berry 1986; Edwards et al. 2004a). The capability for long-distance dispersal, combined with longevity and opportunities to reproduce annually throughout adulthood, indicates high potential for gene exchange outside of local areas. Free genetic exchange will be constrained, however, by the large distributional range of the tortoise given the relatively much smaller home range size and dispersal ability (isolationby-distance phenomenon; see Allendorf and Luikart 2007:209). Topographic features (e.g., mountain ranges) and other potential barriers (e.g., impassable habitat types, extreme climate conditions) can structure regional populations and lead to variable exchange of migrants among populations.*" (pg 55) Approval of this Right of Way could block a portion of this connectivity zone:

Niche modeling and implications of climate change on desert tortoises and other selected reptiles within Joshua Tree National Park , Cameron W. Barrows, University of California, Riverside, 28th September, 2009 *Suitable desert tortoise habitat under current climate conditions was mapped in all but the highest elevation and or most rugged regions of Joshua Tree National Park .Under increasing summer temperatures and reduced annual precipitation scenarios, that suitable habitat initially increases However under more extreme climate shifts the models indicate that suitable habitat for tortoises would become reduced and more fragmented, with much of the central and southern portions of the Park no longer supporting suitable habitat. (pg 7)*

Of the species analyzed, the threatened desert tortoise has been a focus of protection and conservation related research throughout the Mojave Desert (Doak et al. 1994, Chaffee and Berry 2006, Wallace and Thomas 2008). Desert tortoises occur in the Mojave and Sonoran Deserts; within the Sonoran Desert, the majority of their distribution is associated with regions typified by summer monsoon rain patterns; whereas the Mojave Desert's highly variable colder winter-dry summer climate may be a source of stress to the tortoises, and be a contributor to recent population declines (Curtin et al. 2009). Within Joshua Tree National Park, the Colorado Desert subdivision of the Sonoran Desert is drier and hotter still and so may constitute an even more marginal climate for tortoises. With this

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B008-21 co

as a framework for current conditions, a climate shift toward a still more variable, hotter-drier condition would likely further stress the Park's tortoise population. An important component of that stress could be more frequent drought (Parmesan et al. 2000), reducing the availability of annual plants (Wallace and Thomas 2008), which are the tortoises' primary food (Jennings 2002). (pg 17)

While resilient to the evaluated least severe climate change increment, under more severe climate shifts the tortoise niche model indicated a reduction of 9-49% in suitable habitat within the Park. There was also increasing fragmentation; and assuming that a sustainable tortoise population would require at least 1000-5000 ha of contiguous suitable habitat, there could be a more biologically relevant reduction of 76-83% less in available habitat than the current condition.

Desert tortoises within this region rarely range below 500 m elevation. . In extremely arid deserts variation in annual precipitation is high; long periods of drought are often broken with rare pulses of wet conditions (Noy-Meir, 1973; Bell, 1979; MacMahon, 1979), so as the region gets drier drought frequency will likely increase. For annual plant-eating tortoises this would mean extended periods with no food available, and in part would explain the tortoises' absence from lower elevations. Chuckwallas more often forage on perennial trees and shrubs (Kwiatkowski and Sullivan 2002), plants with deeper root systems and so less impacted by short term variation in rainfall. (pg 17,18)

Barrows recommends maintaining these connectivity zones:
1. *Maintaining connectivity to regions outside the Park, especially to the cooler wetter northwest, may provide genetic connections to larger populations outside the Park and so improve the sustainability of those populations inside the Park.*

2. *Taking a longer temporal view, these corridors could provide linkages for reestablishment of species once anthropogenic climate warming is abated.*

3. *Focus management efforts within the Park on maintenance of areas identified in this study as climate change refugia in order to provide the best potential habitat for those at- risk species. These manage efforts may include controlling exotic vegetation and fires (see E. Allen and colleagues).*

4. *Finally, the development of a monitoring program that will provide empirical data on how species and communities within the Park are responding to changes in habitats, including those catalyzed by climate, will be extremely valuable for reinforcing management actions. Such a monitoring program could be implemented through a*

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DESERT PROTECTION SOCIETY AND BASIN & RANGE WATCH

B008-21 cont.

citizen science outreach program (i.e. Sullivan et al. 2009, Howard and Davis 2009). These programs have the potential to provide quality data and relatively low costs, and to strengthen a public support cadre for the Park in the face of increasing challenges to the Park from surrounding development proposals. (pg. 18,19)

Due to the controversy associated with desert tortoise translocation, we would like to request that BLM consider an alternative away from the Proposed Alternative which is located adjacent to the Chuckwalla Critical Habitat for desert tortoise. The below numbers from the Fish and Wildlife Service indicate 50 percent mortality from translocation of desert tortoise.

-Tortoises handled for blood testing will have 5% mortality rate from handling.
- Tortoises translocated will have a 50% mortality rate.
- Resident Tortoises on the recipient site will also have a 50% mortality rate due to competition from translocated tortoises.

B008-22

Golden Eagle Nest Surveys:
EnXco should be required to conduct their own golden eagle nest surveys instead on relying on data from other projects as suggested in the Plan of Development. At this time, that data may be outdated from surveys conducted by Solar Millennium and First Solar.

The loss of foraging habitat is considered a "Take" under the Bald and Golden Eagle Protection Act.

There are six active golden eagle nests within 20 miles of the site. The closest active territory is located one and a half miles from the project boundary, and one Golden Eagle was observed flying south of I-10 in Chuckwalla Valley in the vicinity of the Red Bluff substation during surveys.

B008-23

Impacts to Joshua Tree National Park:

In 1936, Joshua Tree (JoTr) National Monument was established by Presidential Proclamation, to protect and preserve the area's historic, prehistoric, and scientific features, including the natural resources of the Colorado and Mojave deserts. In 1976 JoTr was given federal wilderness designation. In 1977 it received Class I Wilderness airshed status. In 1984, it was designated a World Biosphere Reserve. In 1994, JoTr's status as a nationally significant area was reaffirmed by Congress when they designated it a National Park and added 234,000 acres to the Park and designated an additional 163,000 acres as wilderness.

A new National Park Service (NPS) report shows that in 2010, 1,434,976 visitors spent $58,798,000 in Joshua Tree National Park and in communities near the park. That spending supported 804 jobs in the

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B008-23 co

local area. "The people and the business owners in communities near national parks have always known their economic value," park superintendent Mark Butler said. "Joshua Tree National Park is clean, green fuel for the engine that drives our local economy." Most of the spending/jobs are related to lodging, food, and beverage service (52 percent) followed by other retail (29 percent), entertainment/amusements (10 percent), gas and local transportation (7 percent) and groceries (2 percent).

To download the report visit http://www.nature.nps.gov/socialscience/products.cfm#MGM and click on Economic Benefits to Local Communities from National Park Visitation and Payroll,
2010.

The project would be built very close to the boundary Joshua Tree National Park. The industrial cumulative impacts of two major solar projects will change the character of the park forever and could impact future tourism potential.

The Joshua Tree National Park General Management Plan: http://www.nps.gov/jotr/parkmgmt/gmp.htm makes the following conclusions about activities adjacent to the park that can have negative impacts:

"Developments and other land uses adjacent to the boundary threaten the integrity of the park's resources, views and wilderness values. Surrounding land use has changed significantly since creation of the monument. Subdivisions, utility corridors, mining, military facilities, and agricultural interests are, in some cases, right along the boundary. Eagle Mountain dump has been proposed near the southeast boundary. Concerns include impacts to the desert tortoise and other wildlife, trash blowing, leaks and air quality degradation. Development would intrude on the scene and diminish the naturalness and solitude of the wilderness. Other concerns include effects from air and water pollutants, invasion of non-native species from adjacent lands, and noisy overflights that effect wilderness solitude. The park's resources are also seriously threatened by illegal activities and uncontrolled access along the boundaries, such as off road vehicle use, theft of desert vegetation and archeological resources, wood cutting and dumping of hazardous and domestic wastes.

Fulfillment of the biosphere reserve concept and long-term protection of ecological units that extend outside the boundary are also made more difficult by land use and development around the park. The boundaries were revised in the early 1950's to accommodate mineral extraction. The configuration that had been designed by biologists to protect the natural systems of two deserts has been destroyed in many areas. Consequently, wildlife and vegetation systems were fragmented by uses such as hunting and mining and other developments."

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Lighting:

The Desert Harvest proposal is located in an area of notable night sky quality which is very sensitive. NPS data indicates that the eastern end of Joshua Tree NP possesses the highest quality night sky measured in the park. The DEIS does not adequately describe the affected environment, the potential adverse impacts to the night sky resource, and measures that will be required in order for the applicant to mitigate those impacts to avoid "*creating a new source of substantial light, glare, or adversely affect nighttime views of the area.*" The FEIS should incorporate an adequate analysis of the adverse impacts to the park's night sky resources and propose measures to mitigate those impacts. B008-24

In addition, BLM should require the applicant to develop and implement an Outdoor Lighting Plan, as was done for Desert Sunlight. This would allow detailed articulation of lighting specifications to mitigate and meet the DEIS objectives of not creating significant adverse impact to the nighttime environment. Outdoor lighting, located only at your offices should be no more than 2700 Kelvin color.

There should be no continuous roadway lighting through the project area, only roadway lighting at the entrance of the project access road. The Final EIS should provide information addressing this issue. First Solar's security vehicles had strobes on them that significantly impacted night skies, and interrupting sleep. There should be no strobe lights on any vehicles in the project site. Further, when security or biologists are patrolling/observing wildlife, they must not use high beams on their vehicles at night time.

White lighting (e.g., metal halide) should only be used temporarily when necessitated by work tasks. This source should not be used for general security lighting nor for dusk-to-dawn lighting. White lighting should be less than 2700 Kelvin color temperature (warm white). Blue- white lighting (cool-white) has a much greater environmental impact.

We request that the FEIS and resulting right-of-way permit stipulate that outdoor lighting be less than 2700 Kelvin color temperature (warm white). Blue-white lighting (cool-white) has a much greater environmental impact. Additionally, there are ample commercial solutions in warm white applications.

DPS very much wants this project to be denied. However if it is to go to fruition, there are a number of mitigation measures that must be implemented:

- All transmission lines inside the project area must be buried

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DESERT PROTECTION SOCIETY AND BASIN & RANGE WATCH

under ground. We have seen Ravens perch on the most unlikely sources and transmission lines are ripe for birds who prey on desert tortoise. B008-24 con

- Lighting at night only for repairs, and 2700 Kelvin at your entrance. In this area, even a penlight could be seen in the nighttime from a mile away. There simply are no barriers and light will travel much farther than in urban areas.

- Air monitoring and weather stations needs to be constructed as close as practical to the solar swath.

- Plant ironwood trees, palo verde trees, mesquite trees, jojoba, or other native desert trees/shrubs along the outside fence line in an attempt to shield the solar swath from vision and possible sound barrier.

- All tours to the site, as well as security vehicles must be conducted with electric cars, golf carts, shuttle buses. This would reduce the use of fossil fuels and lessen pollution and noise noise.

- Employees must be shuttled to work from Indio, Blythe and other areas 50 or so miles away, to lessen traffic on Kaiser Road, which is the only road to the community of Eagle Mountain, where the project is proposed.

- Cactus and trees removed for the project must be replanted elsewhere to enable replacement after the life of the project.

- Restore the 29,775 acres of lands in the Eagle Mountains to Joshua Tree National Park

- Construction limited to 100 acre blocks at a time to minimize blowing dust.

Lastly, last year DPS's Executive Director, Donna Charpied was presented with the Golden Presidential Volunteer Service Award. The Letter from President Obama states in part, "…Our Nation faces the most challenging economic crisis in a lifetime. We will only renew America if we all work together. Individuals, the private sector, and government must combine efforts to make real and lasting change so that each person has the opportunity to fullfill his or her potential…".

The governemnt's misguided energy policy is fulfilling the needs of corporate America while rural communities and our vulnerable Parks are being squashed like bugs.

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In closing, we incorporate the comments submitted by Ernest Goitein, member of the Steering Committee of PLAN, Claire Feder, and People for Land and Nature (PLAN), as though fully contained herein.

B008-24 cont.

Respectfully Submitted,

Donna Charpied

Donna Charpied, for
Desert Protection Society
Donna & Larry Charpied
Kevin Emmerich
Basin and Range Watch

CC: Interested Parties

COMMENT SET B009
DEFENDERS OF WILDLIFE, NATURAL RESOURCES DEFENSE COUNCIL, SIERRA CLUB, AND THE WILDERNESS SOCIETY

Defenders of Wildlife
Natural Resources Defense Council
Sierra Club
The Wilderness Society

July 17, 2012

Lynnette Elser
Planning and Environmental Coordinator
California Desert District Office
Bureau of Land Management
22835 Calle San Juan de Los Lagos
Moreno Valley, California 92553
(Via email to: CAdesertharvest@blm.gov; lelser@blm.gov)

Re: Comments on Draft Environmental Impact Statement and Draft CDCA Plan Amendment for the Proposed Desert Harvest Solar Project

Dear Ms. Elser;

B009-1

Thank you for the opportunity to provide comments on the Draft Environmental Impact Statement and Draft California Desert Conservation Area ("CDCA") Plan Amendment for the Proposed Desert Harvest Solar Project. These comments are submitted on behalf of Defenders of Wildlife ("Defenders"), the Natural Resources Defense Council ("NRDC"), the Sierra Club and The Wilderness Society, all non-profit public interest conservation organizations with offices in California as well as elsewhere in this country. These four organizations have been intensively involved in the permitting and decision-making processes for development of renewable energy on public lands particularly here in California over the past three years.

Defenders has more than 1 million members nationwide with more than 170,000 members and supporters in California. Defenders is dedicated to protecting all wild animals and plants in their natural communities. To this end, we employ science, public education and participation, media, legislative advocacy, litigation, and proactive on-the-ground solutions in order to impede the accelerating rate of extinction of species, associated loss of biological diversity, and habitat alteration and destruction.

NRDC has over 1.2 million members and online activists nationwide, more than 250,000 of whom live in California. NRDC uses law, science and the support of its members and activists to protect the planet's wildlife and wild places and to ensure a safe and healthy environment for all living things. NRDC has worked to protect wildlands and natural values on public lands and to promote pursuit of all cost effective energy efficiency measures and sustainable energy development for many years.

The Sierra Club is a national nonprofit organization of approximately 1.3 million members and supporters (approximately 250,000 of whom live in California) dedicated to exploring, enjoying, and protecting the wild places of the earth; to practicing and promoting the responsible use of the earth's ecosystems and resources; to educating and enlisting humanity to protect and restore the quality of

COMMENT SET B009, CONT.
DEFENDERS OF WILDLIFE, NATURAL RESOURCES DEFENSE COUNCIL, SIERRA CLUB, AND THE WILDERNESS SOCIETY

B009-1 cont.

the natural and human environment; and to using all lawful means to carry out these objectives. The Sierra Club's concerns encompass protecting our public lands, wildlife, air and water while at the same time rapidly increasing our use of renewable energy to reduce global warming.

The mission of The Wilderness Society is to protect wilderness and inspire Americans to care for our wild places. We have worked for more than 70 years to maintain the integrity of America's wilderness and public lands and ensure that land management practices are ecologically sustainable and based on sound science. With more than half a million members and supporters nation-wide, TWS represents a diverse range of citizens.

As we transition toward a clean energy future, it is imperative for our future and the future of our wild places and wildlife that we strike a balance between addressing the near term impacts of large scale solar energy development with the long-term impacts of climate change on our biological diversity, fish and wildlife habitat and natural landscapes. To ensure that the proper balance is achieved, we need smart planning for renewable power that avoids and minimizes adverse impacts on wildlife and wild lands. These projects should be placed in the least harmful locations near existing transmission lines and on already disturbed lands.

We strongly support the emission reduction goals found in the Global Warming Solutions Act of 2006, AB 32, including the development of renewable energy in California. However, we urge that in seeking to meet our renewable energy portfolio standard in California, project proponents and land managers ensure that projects are designed from their inception in the most sustainable manner possible. This is essential to ensure that project approval moves forward expeditiously and in a manner that does not sacrifice our fragile desert landscape and wildlife in the rush to meet our renewable energy goals.

Brief description of the proposed project and Federal action: EnXco applied to the BLM for a right of way to develop, operate and decommission a 150 MW photovoltaic solar power plant on approximately 1,280 acres of public land located six miles north of the town of Desert Center in the Chuckwalla Valley. Proposed project facilities include a substation, administration building, operations and maintenance facilities, transmission line, and temporary construction lay down areas. A 230-kilovolt (kV) generation interconnection transmission line would either be via the recently authorized First Solar Desert Sunlight 230-kV gen-tie (as a shared facility), or would be a separate line located on private and BLM-administered lands and would utilize a planned 230 to 500-kV substation (referred to as the Red Bluff Substation). The Red Bluff Substation would connect the project to the Southern California Edison regional transmission grid. Since the proposed Desert Harvest Project site was not previously identified as suitable for electrical power generation in the CDCA Plan, BLM proposes to amend the CDCA Plan to allow for such use while concurrently considering whether or not to grant a right-of-way for the proposed project.

Our specific comments are as follows:

1. Introduction. Our organizations recognize the need to develop our nation's renewable energy resources and to do so rapidly in order to respond effectively to the challenge of climate change. Unique natural resources here in California are already being affected by climate change, including, for example, American pikas in the Sierra Nevada and Joshua trees in the Mojave Desert. We also recognize that renewable energy development can help create jobs in communities that are eager for them, because of the current economic situation. For these and other related reasons, our

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DEFENDERS OF WILDLIFE, NATURAL RESOURCES DEFENSE COUNCIL, SIERRA CLUB, AND THE WILDERNESS SOCIETY

B009-1 con

organizations are working with regulators and project proponents to move properly sited renewable energy projects forward. That said, renewable energy development is not appropriate everywhere on the public lands and must be balanced against the equally urgent need to protect unique and sensitive resources of the CDCA. California is fortunate in having ample renewable resources, and especially solar energy, in many areas of the State, which provide opportunities for development of renewable energy generation and transmission in an environmentally and economically sound manner.

We strongly support renewable energy production and utilization, but we do not consider the construction of large-scale projects, and especially the very large solar energy projects proposed on relatively undisturbed public lands in the CDCA, to be the only way, or even the best way, to achieve our renewable energy goals. Ideally, such large scale solar projects should be located on degraded or disturbed land such as abandoned agricultural fields, industrial sites, and near existing structures rather than on public lands containing intact natural biological communities, particularly those that include threatened, endangered or other at-risk species.

As we and our colleagues at other conservation organizations have repeatedly stated, the best way to develop the renewable energy resources of the CDCA is through comprehensive, pro-active planning, involving federal, state and local governments, to identify the most appropriate areas for such development – *i.e.*, development zones—and to guide development to those zones. See, e.g., letter dated June 29, 2009 to Interior Secretary Salazar and California's Governor Schwarzenegger and signed by 11 conservation organizations, including our own, attached to this letter.

That said, we consider the proposed Desert Harvest solar project to be located in an area with fewer biological resource conflicts than many of the larger scale solar projects proposed or under construction within the Chuckwalla Valley and McCoy Wash areas of the California Desert. This is largely because the project is located near disturbed private land near Desert Center, a paved access road leading to the inactive Kaiser Iron Mine, and the MWD Eagle Mountain Pumping Plant. The proposed project is also located within the proposed Riverside East Solar Energy Zone (SEZ), as proposed by the BLM in its Solar Programmatic Environmental Impact Statement (Solar PEIS) as well as in the Supplement to the Solar PEIS. Our organizations have supported the designation of this SEZ as an appropriate location for the development of large-scale renewable energy facilities, in conjunction with full and fair mitigation for SEZ-level and project-level impacts. Our comments on the proposed project are intended to offer ways in which the project can be made more environmentally appropriate, and we hope that the project applicant as well as the BLM will give them serious consideration.

B009-2

2. Cooperating agencies. On 6/27/2012 BLM received a request from the National Park Service at Joshua Tree National Park for Cooperating Agency status in the NEPA process for the proposed project. The DEIS does not reveal whether or not the National Park Service cooperated in the preparation of the DEIS or to what extent their concerns were addressed in the document. Please provide information on both of these topics in the FEIS.

The DEIS is intended to satisfy the requirements of the California Environmental Quality Act (CEQA) as well as those of NEPA but it does not appear local jurisdictions are participating in the environmental analysis at this time. Since the County of Riverside would have jurisdiction for components of the project located on private land, such as the gen-tie line connecting with the Red Bluff Substation, please indicate how the CEQA and NEPA analyses and the associated mitigation

COMMENT SET B009, CONT.
DEFENDERS OF WILDLIFE, NATURAL RESOURCES DEFENSE COUNCIL, SIERRA CLUB, AND THE WILDERNESS SOCIETY

requirements would be coordinated. It appears the project as a whole includes facilities on federal and private land. We would like to know if any special requirements stemming from CEQA, such as fully mitigating impacts to state listed species and state jurisdictional resources (e.g., ephemeral streams) will be applied to the entire project or simply limited to those occurring on private lands. We suggest that a joint CEQA-NEPA analysis will prove to be the most efficient and effective method to assess project impacts and determine needed mitigation. B009-2 cont.

B009-3

3. Alternatives. NEPA requires that BLM consider a range of alternatives, which is "the heart of the environmental impact statement." 40 C.F.R. § 1502.14. NEPA requires BLM to "rigorously explore and objectively evaluate" a range of alternatives to proposed federal actions. See id. §§ 1502.14(a) and 1508.25(c). "An agency must look at every reasonable alternative, with the range dictated by the nature and scope of the proposed action."[1] An agency violates NEPA by failing to "rigorously explore and objectively evaluate all reasonable alternatives" to the proposed action.[2] This evaluation extends to considering more environmentally protective alternatives and mitigation measures.[3] NEPA requires that an actual "range" of alternatives is considered, so that they will "preclude agencies from defining the objectives of their actions in terms so unreasonably narrow that they can be accomplished by only one alternative (i.e. the applicant's proposed project)."[4] This requirement prevents the EIS from becoming "a foreordained formality."[5]

A. Reduced project size: We appreciate that BLM has identified two alternatives (#5 and #6) that would reduce the size of the solar field in order to 1) exclude 47 acres included within the Palen-Ford Wildlife Habitat Management Area (WHMA) (Alternative #5), and 2) exclude 164 acres to protect nine acres supporting several Crucifixion thorn plants and 155 acres of Blue Palo Verde-Ironwood Woodland (Alternative #6). The DEIS clearly indicates that alternatives #5 and #6 are mutually exclusive, meaning that only one or the other would be considered.

B009-4

Alternative #5, exclusion of the 47 acre portion of the proposed project overlapping the Palen-Ford WHMA, does not appear to provide significant habitat protection benefits because this relatively small area would be fully isolated by the remainder of the project as well as the authorized Desert Sunlight solar project immediately to the north. We believe the most effective means of addressing loss of the 47 acres is through habitat loss compensation at a ratio of 3:1, as identified in the proposed mitigation measures in the DEIS. Compensatory habitat should be acquired in the Palen Valley within the Palen-Ford WHMA and protected in perpetuity.

B009-5

Alternatives #6 and #7 would be more effective in avoiding some concentrations of sensitive plants and some of the Dry Desert Wash Woodland community because they

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[1] Northwest Envtl. Defense Center v. Bonneville Power Admin., 117 F.3d 1520, 1538 (9th Cir. 1997).

[2] City of Tenakee Springs v. Clough, 915 F.2d 1308, 1310 (9th Cir. 1990) (quoting 40 C.F.R. § 1502.14).

[3] *See, e.g.*, Kootenai Tribe of Idaho v. Veneman, 313 F.3d 1094,1122-1123 (9th Cir. 2002) (and cases cited therein).

[4] Colorado Environmental Coalition v. Dombeck, 185 F.3d 1162, 1174 (10th Cir. 1999), citing Simmons v. United States Army Corps of Engineers, 120 F.3d 664, 669 (7th Cir. 1997).

[5] City of New York v. Department of Transp., 715 F.2d 732, 743 (2nd Cir. 1983). *See also*, Davis v. Mineta, 302 F.3d 1104 (10th Cir. 2002).

COMMENT SET B009, CONT.
DEFENDERS OF WILDLIFE, NATURAL RESOURCES DEFENSE COUNCIL, SIERRA CLUB, AND THE WILDERNESS SOCIETY

would eliminate the smaller portion of the project south of Big Wash. Maximizing avoidance of this sensitive plan community is the most appropriate form of mitigation. B009-5 cont

B. U.S. Fish and Wildlife Service (USFWS) recommended alternative: BLM considered, but rejected, a recommendation from the USFWS that two 40 acre parcels of BLM land on the far eastern border of the proposed project be excluded from development and maintained as natural habitat to promote wildlife movement across the Chuckwalla Valley. BLM cited a recent study of habitat connectivity[6] in its rationale for rejecting the USFWS recommended alternative. B009-6

We strongly recommend that BLM analyze and include the USFWS recommended alternative in the FEIS, including the need to acquire or establish a conservation easement on approximately 80 acres of private land located between the two 40 acre BLM parcels. The report cited by BLM, *A Linkage Network for the California Deserts*, to justify its refusal to consider and analyze this alternative, was intended primarily to identify probable least cost pathways or corridors for wildlife movement between protected landscape blocks only (i.e. 22 areas protected from industrial energy projects and new highways, such as Wilderness Areas, National Park Units and Military bases) for four focal species (Desert tortoise, American badger, Desert kit fox and Desert bighorn) and does not reflect actual or probable movements over much larger areas comprised of natural habitat that are suitable for a variety of terrestrial species. By relying only on the modeled least-cost pathways, essentially corridors linking the landscape blocks, BLM is disregarding the report's identification of suitable habitat for the Desert tortoise including potential core, patch and move-through habitats. Figure 58 of the report shows these desert tortoise habitats, and the proposed project occurs in desert tortoise move-through and potential core habitats. BLM appears to have disregarded this aspect of the report in analyzing the USFWS recommended alternative.

4. Power purchase agreements: Many project applicants have signed power purchase agreements with public utility companies for a certain amount of electrical power prior to siting decisions being made. This practice appears to have made some applicants and some regulators, including BLM, unwilling to consider meaningful alternatives to proposed solar and other renewable projects, including possible re-configurations of project footprints and associated changes in energy production. This perceived lack of flexibility must not preclude the BLM's consideration of all alternatives described in the DEIS, not merely the project as proposed or no project. More specifically, the BLM should consider and analyze alternatives which are designed to avoid or significantly minimize identified resource conflicts and concerns including alternative locations involving degraded private or federal lands having minimal biological resource values. B009-7

Furthermore, BLM continues to arbitrarily limit identification, consideration and analysis of alternatives based on the needs of the project applicant which, as noted above, are based on power purchase agreements negotiated between the applicant and public utility responsible for electrical transmission and delivery to users. In dismissing alternatives on degraded private land, BLM assumed that consolidation of parcels sufficient to support the proposed project would be essentially impossible to achieve. This assumption is questionable given recent solar projects planned or B009-8

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[6] Penrod, K., et al. 2012. A Linkage Network for the California Deserts. Produced for the Bureau of Land Management and The Wildlands Conservancy. Prepared by Science and Collaboration for Connected Wildlands, Fair Oaks, CA and Northern Arizona University. 286 pp.

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DEFENDERS OF WILDLIFE, NATURAL RESOURCES DEFENSE COUNCIL, SIERRA CLUB, AND THE WILDERNESS SOCIETY

permitted on private, degraded lands in near Blythe, CA. Developers of these projects have acquired control over parcelized lands sufficient to support projects meeting their needs. B009-8 cont.

5. Microphyll Woodland Plant Community: One of the characteristic and sensitive plant communities within the region is Microphyll Woodland, also referred to as Dry Desert Wash Woodland by the BLM in the Northern and Eastern Colorado (NECO) Plan[1]. The NECO Plan includes Map 3-3 which shows plant communities including Dry Desert Wash Woodland. It appears there is a discrepancy between the amount of this sensitive plant community shown on Map 3-3 and the amount shown on the map of the same provided in the DEIS for the proposed project. This discrepancy needs to be resolved through further study and analysis of the Microphyll Woodland impacted by the proposed project, with the results included in the FEIS. This is especially important considering that the Biological Resources Technical Report accompanying the DEIS indicates that Dry Desert Wash Woodlands occur throughout the proposed project area primarily in dry washes. The full extent of this community occurring in association both in and outside of dry washes needs to be accounted for and addressed in the habitat compensation plan. B009-9

6. Environmental Consequences and Mitigation: Applicant and agency mitigation measures for project impacts are included in the Chapter 4, Environmental Consequences. Below are comments on impacts and proposed mitigation measures. B009-10

A. Loss of natural vegetation communities and mitigation: As noted above, we question the reported 231 acres of Dry Desert Wash Woodland that would be lost due to the proposed project including the proposed gen-tie line (Alternative B). This community may be more extensive than indicated in the DEIS based on our review of BLM's NECO Plan Map 3-3, examination of aerial photos and a site visit. We appreciate that alternatives #6 and #7 would substantially reduce the amount of Dry Desert Wash Woodland lost due to the solar field from 180 acres to approximately 98 acres. The amount of this sensitive plant community that would be lost due to the proposed gen-tie line is an additional 51 acres.

We believe the proposed mitigation measures VEG-1 through VEG-5 are more appropriately characterized as project management. The only one that is clearly associated with mitigation is VEG-6 – preparation and implementation of a compensation plan, which the applicant is reportedly working on with Wildlands, Inc. Because this measure is the most important one proposed in actually mitigating for the loss of natural communities, we strongly recommend that the actual proposed plan be included in the FEIS and made available for public review and comment. Compensatory mitigation is apparently aimed at fully offsetting the loss of natural communities but simply acquiring compensatory habitat will still result in a net loss unless acquisition is combined with enhancement. We are also concerned over the availability of suitable compensatory habitat and its location within the planning area, preferably within the Palen Valley. The compensation plan should clearly identify the area where land acquisition will occur, what habitat enhancing measures will be required and implemented, and a timeframe within which this measure will be completed.

B. Wildlife movement: The impact analysis on wildlife movements was based on the assumption that the proposed project would be built and that only a small portion of the B009-11

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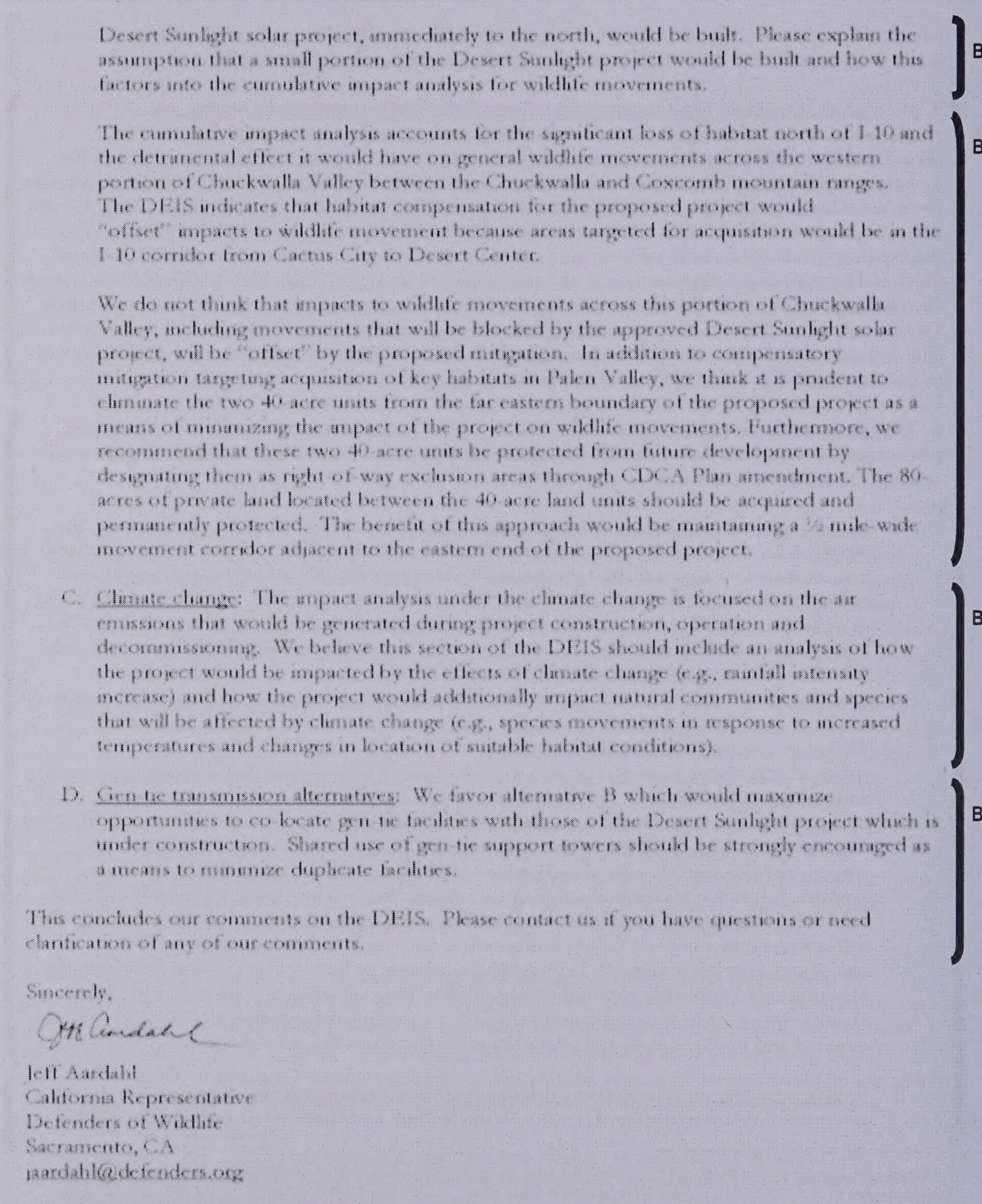
[1] Bureau of Land Management. 2002. Northern and Eastern Colorado Desert Coordinated Management Plan. An amendment to the California Desert Conservation Area Plan. California Desert District, Moreno Valley, CA.

COMMENT SET B009, CONT.
DEFENDERS OF WILDLIFE, NATURAL RESOURCES DEFENSE COUNCIL, SIERRA CLUB, AND THE WILDERNESS SOCIETY



Desert Sunlight solar project, immediately to the north, would be built. Please explain the assumption that a small portion of the Desert Sunlight project would be built and how this factors into the cumulative impact analysis for wildlife movements.

B009-11 co

The cumulative impact analysis accounts for the significant loss of habitat north of I-10 and the detrimental effect it would have on general wildlife movements across the western portion of Chuckwalla Valley between the Chuckwalla and Coxcomb mountain ranges. The DEIS indicates that habitat compensation for the proposed project would "offset" impacts to wildlife movement because areas targeted for acquisition would be in the I-10 corridor from Cactus City to Desert Center.

We do not think that impacts to wildlife movements across this portion of Chuckwalla Valley, including movements that will be blocked by the approved Desert Sunlight solar project, will be "offset" by the proposed mitigation. In addition to compensatory mitigation targeting acquisition of key habitats in Palen Valley, we think it is prudent to eliminate the two 40 acre units from the far eastern boundary of the proposed project as a means of minimizing the impact of the project on wildlife movements. Furthermore, we recommend that these two 40-acre units be protected from future development by designating them as right-of-way exclusion areas through CDCA Plan amendment. The 80-acres of private land located between the 40 acre land units should be acquired and permanently protected. The benefit of this approach would be maintaining a ½ mile-wide movement corridor adjacent to the eastern end of the proposed project.

B009-12

C. Climate change: The impact analysis under the climate change is focused on the air emissions that would be generated during project construction, operation and decommissioning. We believe this section of the DEIS should include an analysis of how the project would be impacted by the effects of climate change (e.g., rainfall intensity increase) and how the project would additionally impact natural communities and species that will be affected by climate change (e.g., species movements in response to increased temperatures and changes in location of suitable habitat conditions).

B009-13

D. Gen-tie transmission alternatives: We favor alternative B which would maximize opportunities to co-locate gen-tie facilities with those of the Desert Sunlight project which is under construction. Shared use of gen-tie support towers should be strongly encouraged as a means to minimize duplicate facilities.

This concludes our comments on the DEIS. Please contact us if you have questions or need clarification of any of our comments.

B009-14

Sincerely,

Jeff Aardahl

Jeff Aardahl
California Representative
Defenders of Wildlife
Sacramento, CA
jaardahl@defenders.org

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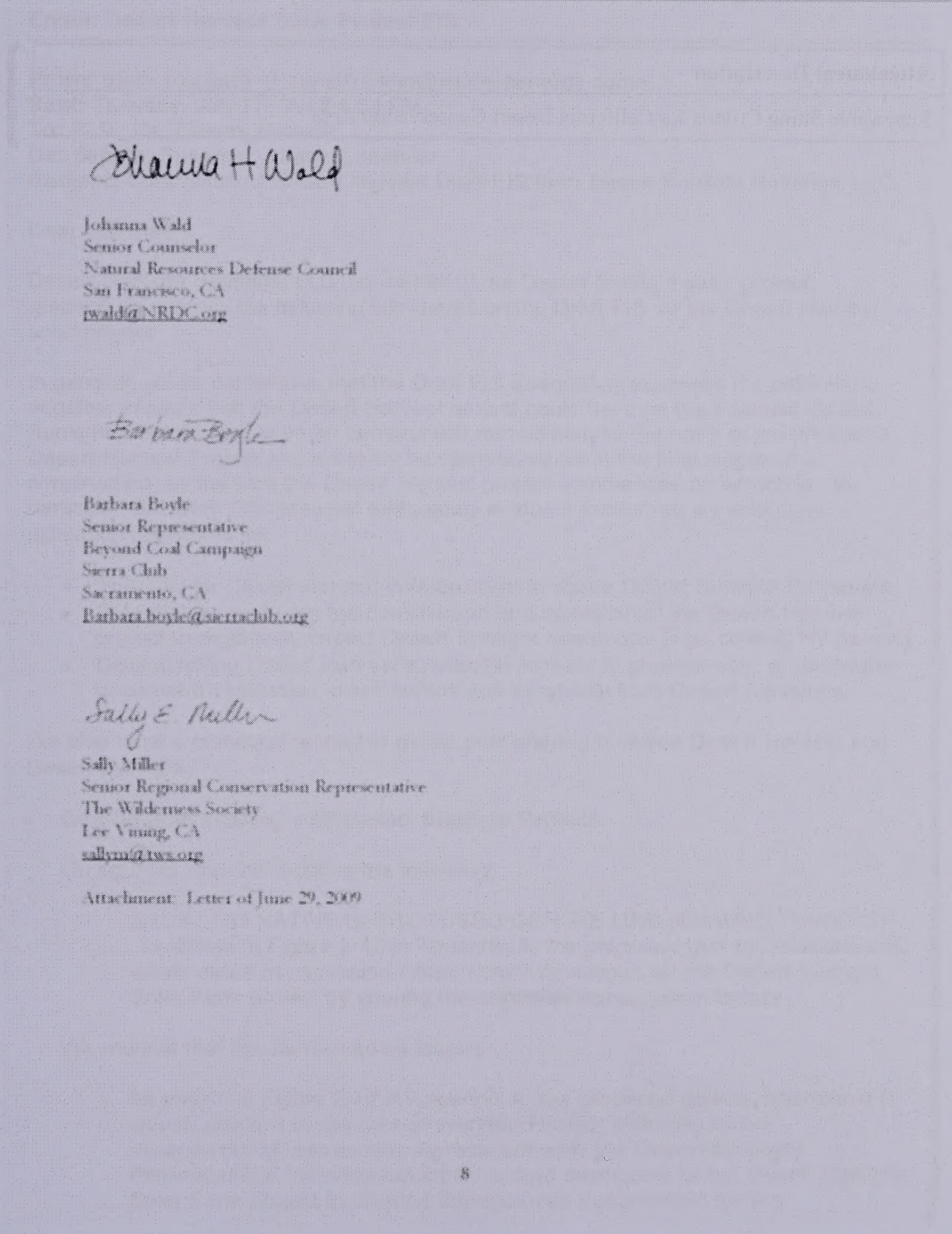
COMMENT SET B009, CONT.
DEFENDERS OF WILDLIFE, NATURAL RESOURCES DEFENSE COUNCIL, SIERRA CLUB, AND THE WILDERNESS SOCIETY



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Attachment: Letter of June 29, 2009

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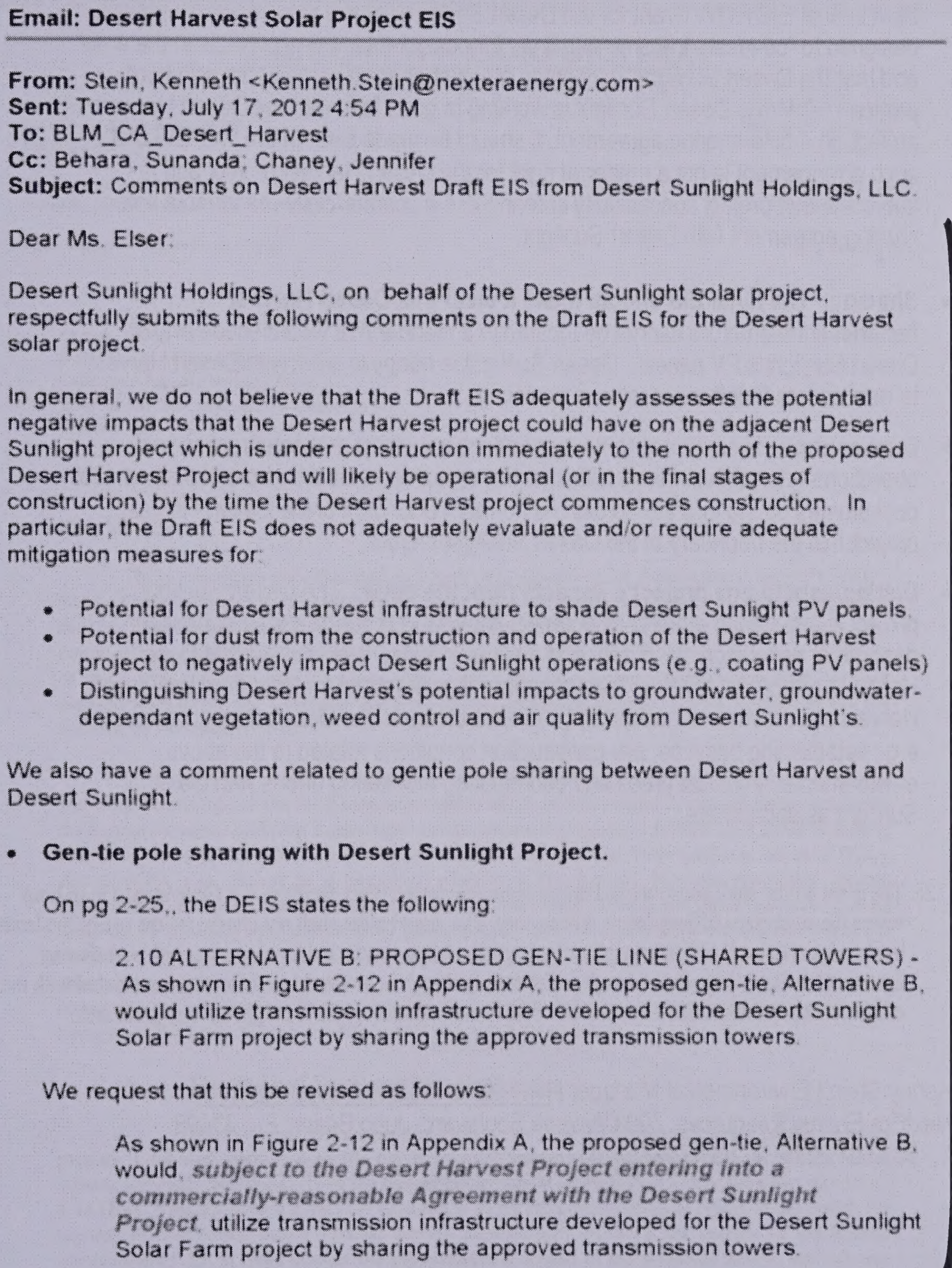
COMMENT SET B009, CONT.
DEFENDERS OF WILDLIFE, NATURAL RESOURCES DEFENSE COUNCIL, SIERRA CLUB, AND THE WILDERNESS SOCIETY

Attachment Description
Renewable Siting Criteria for California Desert Conservation Area

B009-15

COMMENT SET B010
DESERT SUNLIGHT HOLDINGS LLC



Email: Desert Harvest Solar Project EIS

From: Stein, Kenneth <Kenneth.Stein@nexteraenergy.com>
Sent: Tuesday, July 17, 2012 4:54 PM
To: BLM_CA_Desert_Harvest
Cc: Behara, Sunanda; Chaney, Jennifer
Subject: Comments on Desert Harvest Draft EIS from Desert Sunlight Holdings, LLC.

Dear Ms. Elser:

B010-1

Desert Sunlight Holdings, LLC, on behalf of the Desert Sunlight solar project, respectfully submits the following comments on the Draft EIS for the Desert Harvest solar project.

In general, we do not believe that the Draft EIS adequately assesses the potential negative impacts that the Desert Harvest project could have on the adjacent Desert Sunlight project which is under construction immediately to the north of the proposed Desert Harvest Project and will likely be operational (or in the final stages of construction) by the time the Desert Harvest project commences construction. In particular, the Draft EIS does not adequately evaluate and/or require adequate mitigation measures for:

- Potential for Desert Harvest infrastructure to shade Desert Sunlight PV panels.
- Potential for dust from the construction and operation of the Desert Harvest project to negatively impact Desert Sunlight operations (e.g., coating PV panels)
- Distinguishing Desert Harvest's potential impacts to groundwater, groundwater-dependant vegetation, weed control and air quality from Desert Sunlight's.

We also have a comment related to gentie pole sharing between Desert Harvest and Desert Sunlight.

- **Gen-tie pole sharing with Desert Sunlight Project.**

  On pg 2-25,, the DEIS states the following:

  > 2.10 ALTERNATIVE B: PROPOSED GEN-TIE LINE (SHARED TOWERS) - As shown in Figure 2-12 in Appendix A, the proposed gen-tie, Alternative B, would utilize transmission infrastructure developed for the Desert Sunlight Solar Farm project by sharing the approved transmission towers.

  We request that this be revised as follows:

  > As shown in Figure 2-12 in Appendix A, the proposed gen-tie, Alternative B, would, ***subject to the Desert Harvest Project entering into a commercially-reasonable Agreement with the Desert Sunlight Project***, utilize transmission infrastructure developed for the Desert Sunlight Solar Farm project by sharing the approved transmission towers.

COMMENT SET B010, CONT.
DESERT SUNLIGHT HOLDINGS LLC

BLM's Final EIS ROW Grant for the Desert Sunlight Project require that its poles be designed to "co-locate transmission lines for possible additional projects in the area" and that the Desert Sunlight "may enter into cost-sharing agreements with third parties . . ." While Desert Sunlight is working in good faith with the Desert Harvest project on a pole-sharing agreement, it should be made clear in the final EIS that such arrangement is not a matter of right for the Desert Harvest project and is subject to that project successfully entering into a commercially-reasonable pole sharing agreement with Desert Sunlight.

B010-1 co

- **Shading. The Final EIS should make it clear that Desert Harvest facilities/**infrastructure cannot be located in a manner that would shade any of Desert Sunlight's PV panels. Desert Sunlight is happy to work with Desert Harvest to help ensure that this outcome is achieved.

B010-2

- **Dust control.** There needs to be a specific requirement that construction and operations-related dust from the Desert Harvest project must be controlled such that dust plumes do no migrate across the northern boundary of the Desert Harvest project into the boundary of the Desert Sunlight project.

B010-3

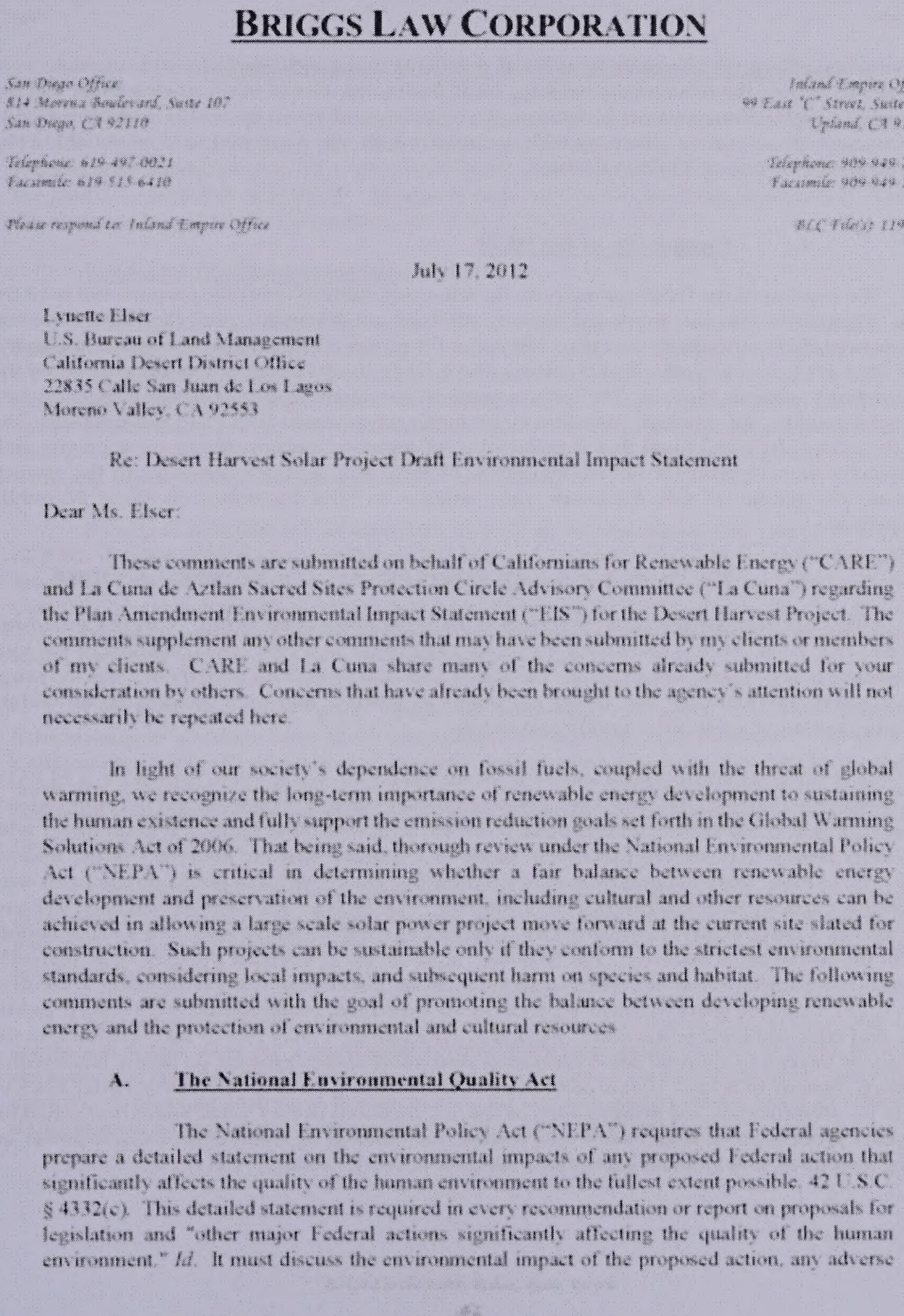
- **Distinguishing one project's impacts from the other.** The Desert Sunlight project is required to monitor its potential impacts to groundwater, groundwater-dependant vegetation, air quality and noxious weeds. We request that Desert Harvest be required to take measures that will ensure that impacts from the Desert Harvest project will not inadvertently be attributable to the Desert Sunlight project – e.g., establishing baseline, pre-construction conditions related to the above environmental technical areas and coordinating monitoring efforts with Desert Sunlight as appropriate.

B010-4

21. The grant holder shall construct and utilize common use ancillary facilities (i.e Generation Tie-in line) where the authorized officer deems it necessary. The grant holder shall not charge for the use of the lands made subject to such additional right-of-way grants; however, the holder may enter into cost sharing agreements with third parties through which it may charge or be reimbursed for costs associated with the construction, operation and maintenance of its linear facilities within the right-of-way grant area.

Kenny Stein | Environmental Manager | kenneth.stein@nexteraenergy.com
NextEra Energy Resources, 700 Universe Boulevard, Juno Beach, FL. 33408
T: 561.691.2216| M: 561.762.5875

COMMENT SET B011
BRIGGS LAW CORPORATION, REPRESENTING CARE AND LA CUNA DE AZATLAN SACRED SITES PROTECTION CIRCLE ADVISORY COMMITTEE



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Please respond to: Inland Empire Office

BLC File(s): 1190.20

July 17, 2012

Lynette Elser
U.S. Bureau of Land Management
California Desert District Office
22835 Calle San Juan de Los Lagos
Moreno Valley, CA 92553

B011-1

Re: Desert Harvest Solar Project Draft Environmental Impact Statement

Dear Ms. Elser:

These comments are submitted on behalf of Californians for Renewable Energy ("CARE") and La Cuna de Aztlan Sacred Sites Protection Circle Advisory Committee ("La Cuna") regarding the Plan Amendment Environmental Impact Statement ("EIS") for the Desert Harvest Project. The comments supplement any other comments that may have been submitted by my clients or members of my clients. CARE and La Cuna share many of the concerns already submitted for your consideration by others. Concerns that have already been brought to the agency's attention will not necessarily be repeated here.

In light of our society's dependence on fossil fuels, coupled with the threat of global warming, we recognize the long-term importance of renewable energy development to sustaining the human existence and fully support the emission reduction goals set forth in the Global Warming Solutions Act of 2006. That being said, thorough review under the National Environmental Policy Act ("NEPA") is critical in determining whether a fair balance between renewable energy development and preservation of the environment, including cultural and other resources can be achieved in allowing a large scale solar power project move forward at the current site slated for construction. Such projects can be sustainable only if they conform to the strictest environmental standards, considering local impacts, and subsequent harm on species and habitat. The following comments are submitted with the goal of promoting the balance between developing renewable energy and the protection of environmental and cultural resources.

A. The National Environmental Quality Act

The National Environmental Policy Act ("NEPA") requires that Federal agencies prepare a detailed statement on the environmental impacts of any proposed Federal action that significantly affects the quality of the human environment to the fullest extent possible. 42 U.S.C. § 4332(c). This detailed statement is required in every recommendation or report on proposals for legislation and "other major Federal actions significantly affecting the quality of the human environment." *Id.* It must discuss the environmental impact of the proposed action, any adverse

-1-

COMMENT SET B011, CONT.
BRIGGS LAW CORPORATION, REPRESENTING CARE AND LA CUNA DE AZATLAN SACRED SITES PROTECTION CIRCLE ADVISORY COMMITTEE

B011-1 c

environmental effects which cannot be avoided should the proposal be implemented, alternatives to the proposed action, the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented. 40 U.S.C. § 4332(2)(C)(I)-(v).

1. Complexity of the DEIS

The sections of the DEIS setting forth the summary, table of contents, purpose and need for action, alternatives to the proposed action, affected environment, and the environmental consequences shall normally be less than 300 pages for proposals of unusual scope or complexity. 40 C.F.R. § 1502.7. Currently, these sections of the DEIS run 941 pages, with the entirety of the DEIS totaling thousands of pages. The Environmental Consequences section alone totals 615 pages. The goal is quality, not quantity and more is not better when masks important information. The DEIS is so long an convoluted that it makes the information inaccessible to most people and, consequently, fails to properly inform the public of the nature and consequences of the project. Depriving the public of full disclosure runs counter to NEPA's policy in favor of public participation.

B011-2

2. The Purpose and Need Statements Are Too Narrowly Construed

An agency "cannot define its objectives in unreasonably narrow terms." *City of Carmel-by-the-Sea v. U.S. Dept. of Transportation*, 123 F.3d 1142 (9th Cir. 1997). The statement of purpose and alternatives are closely linked since "the stated goal of a project necessarily dictates the range of 'reasonable' alternatives." *Id.* BLM has based its purpose and need sections on an unduly restrictive reading of applicable statutes and orders.

BLM states that the purpose and need for the Proposed Action "is to respond to a FLPMA ROW application submitted by the Applicant to construct, operate, maintain, and decommission a solar-energy generating facility and associated infrastructure on BLM lands…in compliance with The Energy Policy Act…set[ting] forth the 'sense of Congress' that the Secretary of the Interior should seek to have approved non-hydropower renewable energy projects on the public lands with a generation capacity of at least 10,000 MW by 2015." DEIS 1-4. The purpose and need to focus on the agency's purpose and need and not the applicant's; focusing on the applicant's needs unduly restricts the alternatives analysis. Furthermore, none of the referenced policies is as narrowly tailored as requiring the siting of a utility-scale solar energy development on public lands. Executive Order 13212 calls for energy-related projects to be expedited, while maintaining safety, public health, and environmental protections. Ex. PN 1. The Energy Policy Act of 2005 encourages the Secretary of Interior to approve non-hydropower renewable energy projects on public lands with a generation capacity of at least 10,000 megawatts of electricity. Ex. PN 2. Secretarial Order 3285A1 calls for the identification and prioritization of specific locations in the United States best suited for large-scale production of solar, wind, geothermal, incremental or small hydroelectric power on existing structures, and biomass energy (*e.g.* renewable energy zones). Ex. PN 3.

COMMENT SET B011, CONT.
BRIGGS LAW CORPORATION, REPRESENTING CARE AND LA CUNA DE AZATLAN SACRED SITES PROTECTION CIRCLE ADVISORY COMMITTEE

B011-3

3. The EIS Fails to Look at a Reasonable Range of Alternatives

NEPA requires that an EIS contain a discussion of the "alternatives to the proposed action." 42 U.S.C. §§ 4332(2)(C)(iii) & (E). The discussion of alternatives is at "the heart" of the NEPA process and is intended to provide a "clear basis for choice among options by the decisionmaker and the public." 40 C.F.R. § 1502.14. An agency must look at all reasonable alternatives. *Native Ecosystems Council v. U.S. Forest Serv.*, 428 F.3d 1233 (9th Cir. 2005).

Renewable Distributed Generation

Although a DG alternative may be outside BLM's jurisdiction, the alternatives analysis is not limited to an agency's jurisdiction. *See* 40 C.F.R. § 1502.14(c). Distributed rooftop photovoltaics ("PV") has a much less significant environmental impact than utility-scale concentrated solar. As recognized by the National Renewable Energy Lab, distributed PV has benefits such as low land use and no transmission. Ex. A1. The National Renewable Energy Lab has further recognized that DG sources such as rooftop PV and small wind turbines have substantial potential to provide electricity with little impact on land, air pollution, or CO_2 emissions. *Id.*

If the goal is 10,000 MW of electricity by 2015 as articulated under the Energy Policy Act of 2005, distributed solar can meet that goal. On page 193 of the California Energy Commission Integrated Energy Policy Report (December 2009), it states that a 2007 estimate from the Energy Commission suggests that there is roof space for over 60,000 MW of PV capacity. Ex. A2. *See also* Exs. A3 & A4. In other words, California alone has the capacity to meet the goals of providing well over 10,000 MW of electricity through distributed generation.

California has taken great strides in promoting renewable DG with Governor Schwarzenegger's Million Solar Roofs program and the legislation that followed. Exs. A5-A15. California has also gone a long way in not only implementing legislation, but actually getting a smart-grid system into operation. Exs. A18-A22. Altogether, a renewable DG alternative would encourage cooperation between states and the federal government to implement a comprehensive renewable-energy strategy.

Furthermore, the federal government has undergone a number of projects to promote distributed PV, demonstrating that a DG alternative is a reasonable alternative. For example, photovoltaics have been installed on rooftops of federal correctional facilities, military bases, and postal service buildings. Exs. A37-A44.

Altogether, an analysis of a DG alternative or an alternative that includes at least some DG component would allow for a meaningful review of the appropriate balance to strike between environmental impacts caused by land-intensive utility-scale generation and the electricity-generation capacity. Without an analysis of this alternative, the decision-makers cannot make an informed decision about what impacts are an acceptable cost for the benefit attained.

COMMENT SET B011, CONT.
BRIGGS LAW CORPORATION, REPRESENTING CARE AND LA CUNA DE AZATLAN SACRED SITES PROTECTION CIRCLE ADVISORY COMMITTEE

B011-4

Conservation and Demand-Side Management

Conservation, demand response and other demand-side measures can reduce congestion on the grid and meet our energy demands. *See* Exs. A47 & A48. Conservation and other demand-side alternatives are needed to provide the basis for informed decision-making about the environmental impacts of increased transmission. Therefore, this alternative should have been considered in the EIS.

Again, although a demand-side management alternative may be outside BLM's jurisdiction, the alternatives analysis is not limited to an agency's jurisdiction. *See* 40 C.F.R. § 1502.14(c). The benefits of energy efficiency and demand response have landed these issues at the top of the California loading order. Ex. A30. There has been a significant amount of new research emerging on the demand side of energy management and a push both at the state and federal level for improving demand. *See* Exs. A30-A34.

B011-5

Other Federal, State, or Private Land

As shown in the preceding section, there are a number of examples of siting renewable-energy developments on federal, state, or private land. Exs. A37-A44. Looking at such an alternative is reasonable here.

Alternatives were rejected as "too difficult and expensive." DEIS 2-69. However, there is no evidence justifying this conclusion. *See Columbia Basin Land Protection Ass'n v. Schlesinger*, 643 F.2d 585 (9th Cir. 1981). More information should be provided so as to adequately justify why alternative siting, or the use of private lands, is not presented as an option for this project.

Class I land should have been considered as an alternative.

B011-6

Other Technology

The project proposes the use of solar thermal technology. Other technology should be considered that could have less significant impacts. For example, other projects have found it financially feasible to use photovoltaics rather than solar thermal and photovoltaics have a less significant impact, particularly on water supply.

B011-7

Other Use

The presented alternatives requiring an amendment – all alternatives except for alternative 1 and alternative A – would require a Plan amendment, and yet, are deficient in discussing the BLM's management's desert-wide obligation to achieve and maintain a balance between resource use and resource protection.

COMMENT SET B011, CONT.
BRIGGS LAW CORPORATION, REPRESENTING CARE AND LA CUNA DE AZATLAN SACRED SITES PROTECTION CIRCLE ADVISORY COMMITTEE

B011-8

4. The EIS Fails to Adequately Analyze Socioeconomic Impacts

The EIS fails to address how the gas and electric bill of local ratepayers in the region would be affected. There is growing evidence that the cost of mandating renewable energy sources and providing the transmission lines to deliver it may outweigh environmental benefits, increase electricity prices, and, in the long run, reduce jobs instead of creating them. *See* Ex. PN4 & PN5. The implementation of mandates is proceeding so rapidly that energy consumers are being locked into higher rates for many years to come. *Id.* A recent study conducted by the Manhattan Institute reveals a patter of higher rates in states with renewable portfolio standards mandates compared with those states without such mandates. *Id.*

At the very least, the DEIS should have addressed the impact this project would have on rates charged to energy consumers.

B011-9

5. The EIS Fails to Adequately Analyze and Mitigate Impacts to Desert Tortoises

BLM acknowledges that desert tortoises are generally found throughout the region where the solar facility would be located and that it is assumed the entire solar facility site and all gen-tie line alternative alignments might be occupied by desert tortoises at any time. It cannot be denied that this project will directly, indirectly, and cumulatively impact desert tortoises. The mitigation measures listed to address these impacts are grossly inadequate. Among the impacts are: habitat loss, fragmented habitat, loss of connectivity, and potential increases in susceptibility to predators such as ravens. In addressing these impacts, the mitigation measures proposed are tortoise translocation and other vague measures such as "permanent protection and management of compensation lands" and "enhancement actions, as needed, such as habitat restoration…" DEIS 4.4-10. However, these measures, in and of themselves, result in negative impacts to tortoises such as elevated stress hormones, changes in behavior and social interaction, spread of disease, increased predation, and death. *See* B3-B8. The risks and uncertainties of translocation of desert tortoises are well recognized in the scientific community. DEIS 4.4-9. Yet, no mitigation measures are provided for these translocation impacts except a vague statement about an alternate strategy in which desert tortoises would be removed from the wild at the project site and placed permanently into conservation facilities. However, the DEIS makes no mention of where these conservation facilities exist. The DEIS does not estimate the number of tortoises on the project site, or the site where the tortoises will supposedly be translocated.

B011-10

6. The EIS Fails to Adequately Analyze and Mitigate Impacts To Kit Foxes

BLM acknowledges that kit foxes are generally found throughout the region where the solar facility would be located and that it is assumed the entire solar facility and all gen-tie line alternative alignments might be occupied by kit foxes. The mitigation measures listed to address the possible impact on kit foxes is grossly inadequate. Among the possible impacts is the outbreak of canine distemper, resulting in death. There is a strong possibility this outbreak may lead to an epidemic, as is evidenced by a previous outbreak to kit foxes during the Genesis Solar Energy Project. *See* Ex.

COMMENT SET B011, CONT.
BRIGGS LAW CORPORATION, REPRESENTING CARE AND LA CUNA DE AZATLAN SACRED SITES PROTECTION CIRCLE ADVISORY COMMITTEE

B9 & B10. The DEIS makes reference to canine distemper and a vague statement about containing the virus, but provides no specifics on how it will accomplish this goal. B011-10

7. **The EIS Fails to Adequately Analyze and Mitigate Impacts to Dry Desert Wash Woodlands** B011-11

The proposed project falls within an area containing the Dry Desert Wash Woodland, noted for its ecological significance in BLM's Northern and Eastern Colorado Desert Plan (NECO Plan). The NECO Plan contains conservation provisions for Dry Desert Wash Woodlands:

"The requirements for compensation at 3:1 replacement acres would discourage project placement in Desert Dry Wash Woodland and Desert Chenopod Scrub communities. Both of these are present in small amounts, but add greatly to overall plant diversity in the planning area. Similar compensation rates for disturbance of closed dunes and playas communities would likewise discourage projects on these very rare communities." Ex. B5.

Regardless of the 3:1 habitat loss compensation requirement, this project proposes no alternative, other than its no action alternative, that steers completely clear of the Desert Dry Wash Woodland communities. Considering the importance of the Desert Dry Wash Woodland to the long term conservation on public lands in this planning area, alternatives to the proposed project that completely avoid this habitat type should be included in the final EIS.

8. **The EIS Fails to Consider the Indirect Impacts of New Roads** B011-12

Agencies need not consider potential effects that are highly speculative or indefinite. They must consider only those indirect effects that are reasonably foreseeable. *Kleppe v. Sierra Club*, 427 U.S. 390 (1992). The construction phase of this project would include the building of roads to provide access to the project's facilities. It is reasonably foreseeable that new roads providing access to the open desert area would increase off-road vehicle use in the area and access to areas that would otherwise be inaccessible. *See* Ex. H4.

9. **The EIS Fails to Adequately Analyze Cumulative Impacts** B011-13

The EIS fails to adequately analyze cumulative impacts. The purpose of a cumulative impacts analysis is to examine the specific project and its interactive and synergistic adverse environmental effects when considered in the context of similar projects. *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.*, 387 F.3d 989 (9th Cir. 2004). The EIS should have considered all solar energy projects within the CDCA. Congress has recognized that "the California desert environment is a total ecosystem that is extremely fragile, easily scarred, and slowly healed." 43 U.S.C. § 1781(a)(2). As a special area, Congress required that a "comprehensive, long-range plan for the management, use, development and protection of the public lands within the California Desert Conservation Area" be prepared. *Id.* at § 1781(d). Failing to look at similar projects, all requiring amendments to the CDCA Plan defies the Congressional mandate for a cohesive plan. *See* Exs. C1-7, C9-12, C23. Yet that is precisely what happened here. Section C of the attached index provides a thorough overview of the projects that should have been considered in the DEIS.

COMMENT SET B011, CONT.
BRIGGS LAW CORPORATION, REPRESENTING CARE AND LA CUNA DE AZATLAN SACRED SITES PROTECTION CIRCLE ADVISORY COMMITTEE

The geographic restrictions are also arbitrary with respect to cultural resources. You should have considered the impacts of all the projects on Chemehuevi, Fort Mojave and other Native American ancestral land. B011-13 cont.

B011-14

10. A Programmatic EIS Should Have Been Prepared

A programmatic environmental impact statement ("PEIS") should have been prepared. The Bureau of Land Management's NEPA compliance handbook requires a PEIS under circumstances like those present here. "Connected actions are those actions that are 'closely related' and 'should be discussed' in the same NEPA document." Ex. P1.

The Department of Interior has implicitly acknowledged that the large number of solar energy projects being proposed in the Southwest are intimately connected and a programmatic EIS is necessary by preparing a PEIS for "Solar Energy Development in Six Southwestern States." Ex. P2. The problem is that the PEIS has not yet been approved and site-specific projects should tier off this document. Ex. P3. Unfortunately, the Palen Project is moving in reverse order, with a site-specific project coming before the programmatic impacts are understood.

B011-15

11. The EIS Fails to Adequately Analyze Cultural Resources

There are several problems with respect to cultural resources. The project site is on or near several significant Chemehuevi and Fort Mojave resources. Unfortunately, there has not been adequate consultation with Native American tribes, representatives, and other interested people and entities. Significantly, the project will restrict access to religious and culturally-significant sites in violation of the Religious Freedom Restoration Act. In addition, the EIS does not adequately address the project's impacts on Native American sacred sites and culturally-significant sites and artifacts. These issues need to be addressed before the project can go forward.

B011-16

12. The EIS Fails to Identify Appropriate Mitigation

"Implicit in NEPA's demand that an agency prepare a detailed statement on 'any adverse environmental effects which cannot be avoided should the proposal be implemented,' 42 U.S.C. § 4332(C)(ii), is an understanding that an EIS will discuss the extent to which adverse effects can be avoided." *Robertson v. Methow Valley Citizens*, 490 U.S. 332 (1989). NEPA requires that an EIS discuss mitigation measures with "sufficient detail to ensure that environmental consequences have been fairly evaluated." *Id.* A mitigation discussion must have at least some evaluation of the effectiveness of the mitigation. *South Fork Band Council of Western Shoshone v. Department of the Interior*, 588 F.3d 718 (9th Cir. 2009).

COMMENT SET B011, CONT.
BRIGGS LAW CORPORATION, REPRESENTING CARE AND LA CUNA DE AZATLAN SACRED SITES PROTECTION CIRCLE ADVISORY COMMITTEE

B011-17

B. The Project Violates the Federal Land Management and Policy Act

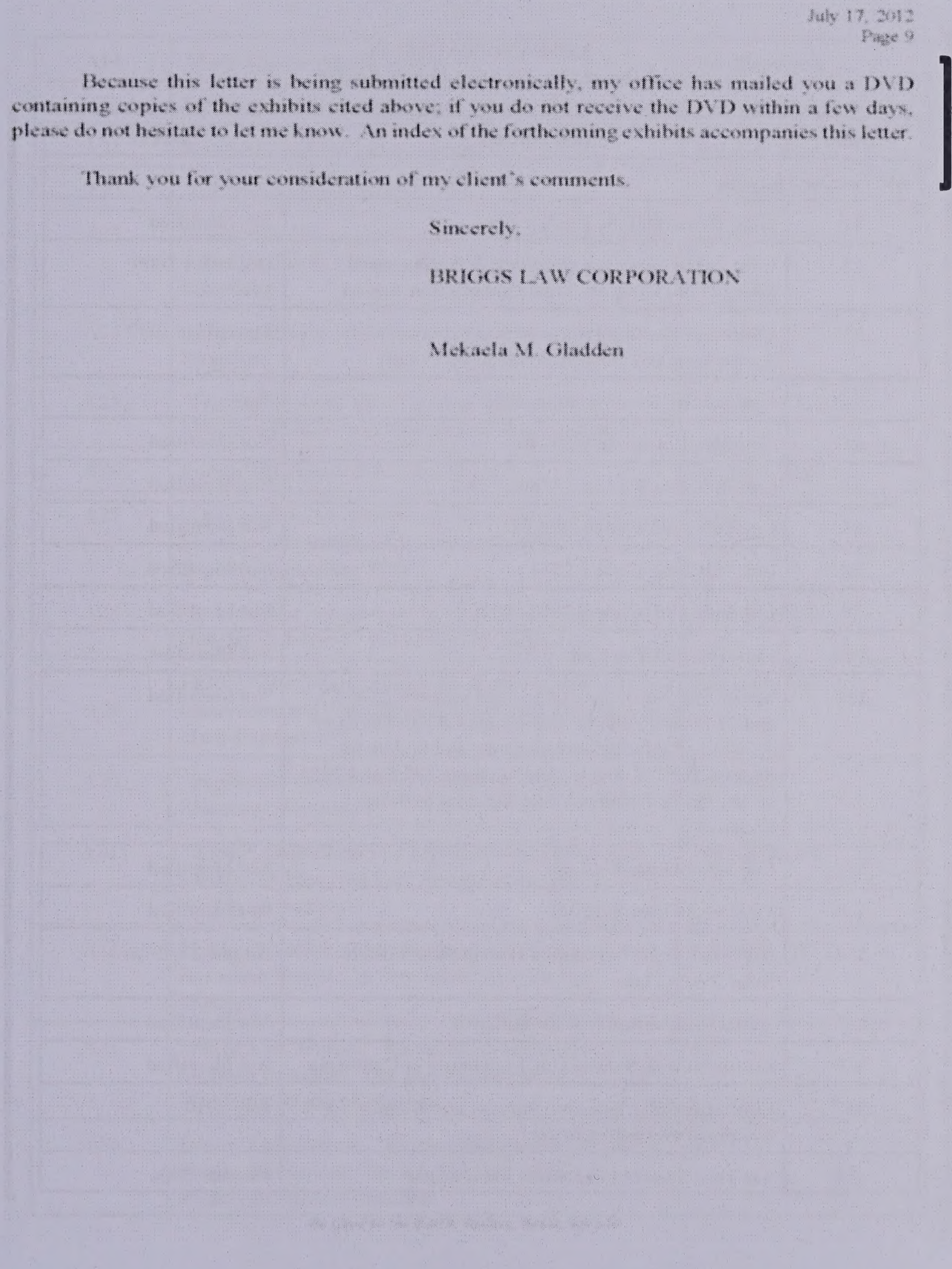
The Federal Land Management and Policy Act ("FLPMA") declares that public lands be managed for multiple uses in a manner that will protect the quality of the scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values. 43 U.S.C. § 1701 (a)(7) and (8). FLMPA provides a framework in which public lands are to be managed for the benefit of present and futre generations. Congress required the BLM to "take any action necessary to prevent unnecessary or undue degradation of the lands." 43 U.S.C. § 1732(b).

As part of FLPMA, Congress designated 25 million acres of Southern California as the Californian Desert Conservation Area (CDCA). 43 U.S.C. § 1781(c),finding that this desert and its resources are "extremely fragile, easily scarred, and slowly healed." 43 U.S.C. § 1781(a)(2). In conjunction with this designation, Congress directed the BLM to implement a long-range plan for the management of this land within the framework of the CDCA, which is today known as the CDCA Plan. Under the CDCA Plan, BLM is required "to provide for the immediate and future protection and administration of the public lands in the California desert within the framework of a program of multiple use and sustained yield, and the maintenance of the environmental quality." 43 U.S.C. § 1781(b). "Once a land use plan is developed, '[a]ll future resource management authorization and action . . . shall conform to the approved plan.'" *Oregon Natural Resources Council Fund v. Brong*, 492 F.3d 1120, 1125 (9th Cir. 2007). The CDCA Plan also requires that where an amendment is proposed, the BLM must "evaluate the effect of the proposed amendment on BLM's management's desert-wide obligation to achieve and maintain a balance between resource use and resource protection." CDCA Plan at 121.

Under Chapter 7 of the CDCA Plan, the BLM must analyze six criteria when considering a plan amendment. The BLM must 1) determine if the request has been properly submitted and if any law or regulation prohibits granting the requested amendment; 2) determine if alternative locations within the CDCA are available which would meet the applicant's needs without requiring a change in the Plan's classification, or an amendment to any Plan element, 3) determine the environmental affects of granting and or implementing the applicant's request; 4) consider the economic and social impacts of granting and/or implementing the applicant's request; 5) provide opportunities for and consideration of public comment on the proposed amendment, including input from the public and from Federal, State, and local government agencies, and 6), evaluate the effect of the proposed amendment on BLM management's desert-wide obligation to achieve and maintain a balance between resource use and resource protect. *See* CDCA Plan, Chapter 7, p. 121. Lastly, the BLM failed to consider alternatives that avoid the disruption of sensitive cultural resources, including the disturbance of Native American remains, which has already occurred in past similar projects. *See* Ex. B10.

***

COMMENT SET B011, CONT.
BRIGGS LAW CORPORATION, REPRESENTING CARE AND LA CUNA DE AZATLAN SACRED SITES PROTECTION CIRCLE ADVISORY COMMITTEE



July 17, 2012
Page 9

Because this letter is being submitted electronically, my office has mailed you a DVD containing copies of the exhibits cited above; if you do not receive the DVD within a few days, please do not hesitate to let me know. An index of the forthcoming exhibits accompanies this letter.

B011-17 cont.

Thank you for your consideration of my client's comments.

Sincerely,

BRIGGS LAW CORPORATION

Mekaela M. Gladden

COMMENT SET B011, CONT.
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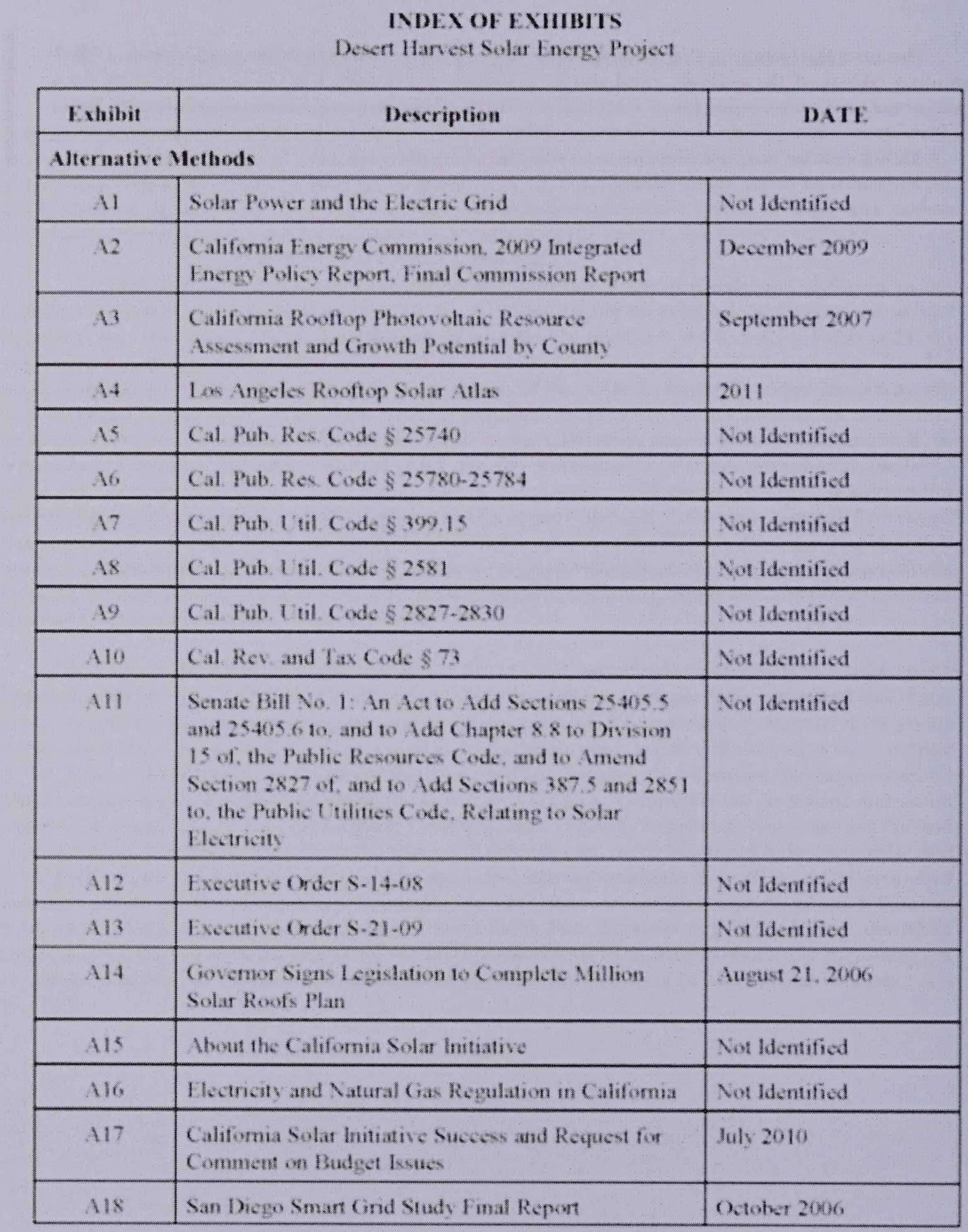

INDEX OF EXHIBITS

Desert Harvest Solar Energy Project

Exhibit	Description	DATE
Alternative Methods		
A1	Solar Power and the Electric Grid	Not Identified
A2	California Energy Commission, 2009 Integrated Energy Policy Report, Final Commission Report	December 2009
A3	California Rooftop Photovoltaic Resource Assessment and Growth Potential by County	September 2007
A4	Los Angeles Rooftop Solar Atlas	2011
A5	Cal. Pub. Res. Code § 25740	Not Identified
A6	Cal. Pub. Res. Code § 25780-25784	Not Identified
A7	Cal. Pub. Util. Code § 399.15	Not Identified
A8	Cal. Pub. Util. Code § 2581	Not Identified
A9	Cal. Pub. Util. Code § 2827-2830	Not Identified
A10	Cal. Rev. and Tax Code § 73	Not Identified
A11	Senate Bill No. 1: An Act to Add Sections 25405.5 and 25405.6 to, and to Add Chapter 8.8 to Division 15 of, the Public Resources Code, and to Amend Section 2827 of, and to Add Sections 387.5 and 2851 to, the Public Utilities Code, Relating to Solar Electricity	Not Identified
A12	Executive Order S-14-08	Not Identified
A13	Executive Order S-21-09	Not Identified
A14	Governor Signs Legislation to Complete Million Solar Roofs Plan	August 21, 2006
A15	About the California Solar Initiative	Not Identified
A16	Electricity and Natural Gas Regulation in California	Not Identified
A17	California Solar Initiative Success and Request for Comment on Budget Issues	July 2010
A18	San Diego Smart Grid Study Final Report	October 2006

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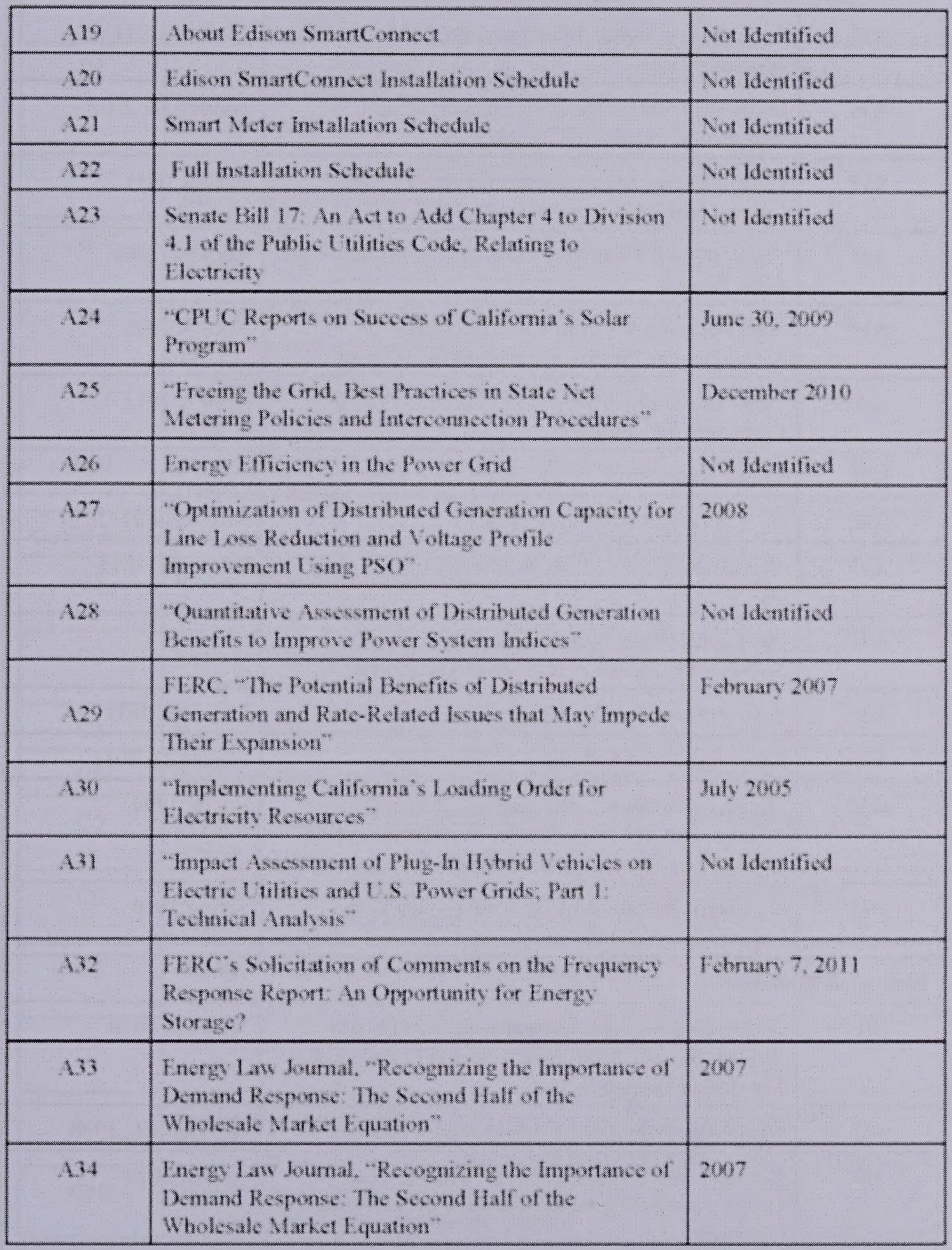
COMMENT SET B011, CONT.
BRIGGS LAW CORPORATION, REPRESENTING CARE AND LA CUNA DE AZATLAN SACRED SITES PROTECTION CIRCLE ADVISORY COMMITTEE



A19	About Edison SmartConnect	Not Identified
A20	Edison SmartConnect Installation Schedule	Not Identified
A21	Smart Meter Installation Schedule	Not Identified
A22	Full Installation Schedule	Not Identified
A23	Senate Bill 17: An Act to Add Chapter 4 to Division 4.1 of the Public Utilities Code, Relating to Electricity	Not Identified
A24	"CPUC Reports on Success of California's Solar Program"	June 30, 2009
A25	"Freeing the Grid, Best Practices in State Net Metering Policies and Interconnection Procedures"	December 2010
A26	Energy Efficiency in the Power Grid	Not Identified
A27	"Optimization of Distributed Generation Capacity for Line Loss Reduction and Voltage Profile Improvement Using PSO"	2008
A28	"Quantitative Assessment of Distributed Generation Benefits to Improve Power System Indices"	Not Identified
A29	FERC, "The Potential Benefits of Distributed Generation and Rate-Related Issues that May Impede Their Expansion"	February 2007
A30	"Implementing California's Loading Order for Electricity Resources"	July 2005
A31	"Impact Assessment of Plug-In Hybrid Vehicles on Electric Utilities and U.S. Power Grids; Part 1: Technical Analysis"	Not Identified
A32	FERC's Solicitation of Comments on the Frequency Response Report: An Opportunity for Energy Storage?	February 7, 2011
A33	Energy Law Journal, "Recognizing the Importance of Demand Response: The Second Half of the Wholesale Market Equation"	2007
A34	Energy Law Journal, "Recognizing the Importance of Demand Response: The Second Half of the Wholesale Market Equation"	2007

B011-18 cont.

COMMENT SET B011, CONT.
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A35	Solar Energy: Better Than Fossil Fuels, Worse than Anything Else	April 11, 2011
A36	Distributed Energy Resources Guide: Wind Turbines-Strengths and Weaknesses	January 18, 2002
A37	Federal Energy Management Program, Federal Correctional Institution-Phoenix, Arizona	April 8, 2011
A38	"Navy Region Southwest Saves Energy, Money with Solar Project"	April 30, 2009
A39	Superior Solar Systems, LLC Completes 79-Kilowatt Solar Electric Installation for NASA	April 8, 2011
A40	VanGuard Energy Partners LLC-Fairton Federal Correctional Institution	April 8, 2011
A41	United States Navy, Pearl Harbor-Case Study	
A42	"U.S. Navy's Solar Power Push"	November 22, 2010
A43	"Solar Panels for Federal Building Awaiting Final Ok"	March 18, 2011
A44	The United States Postal Service Generates Clean Energy with 4 SunPower Systems-Case Study	
A45	Solar Millennium AG Adopts Strategic Realignment	August 8, 2011
A46	Solar Panels-Solar Thermal vs. Photovoltaic	August 23, 2011
A47	"Integrated Resource Planning and Demand-Side Management in Electric Utility Regulation: Public Utility Panacea or a Waste of Energy?"	Spring 1994
A48	"Focusing on Demand Side Management in the Future of the Electric Grid"	Spring 2010
Biological Resources		
B1	Endangered Species Law and Policy, "Fish and Wildlife Service Reinstates Proposed Listing of the Flat-Tailed Horned Lizard"	March 2, 2010
B2	UC Davis, "Preserving the Swainson's Hawk"	November 6, 1998
B3	U.S. Fish and Wildlife Service, "Translocation of Desert Tortoises From Project Sites: Development Guidance"	August 2010

COMMENT SET B011, CONT.
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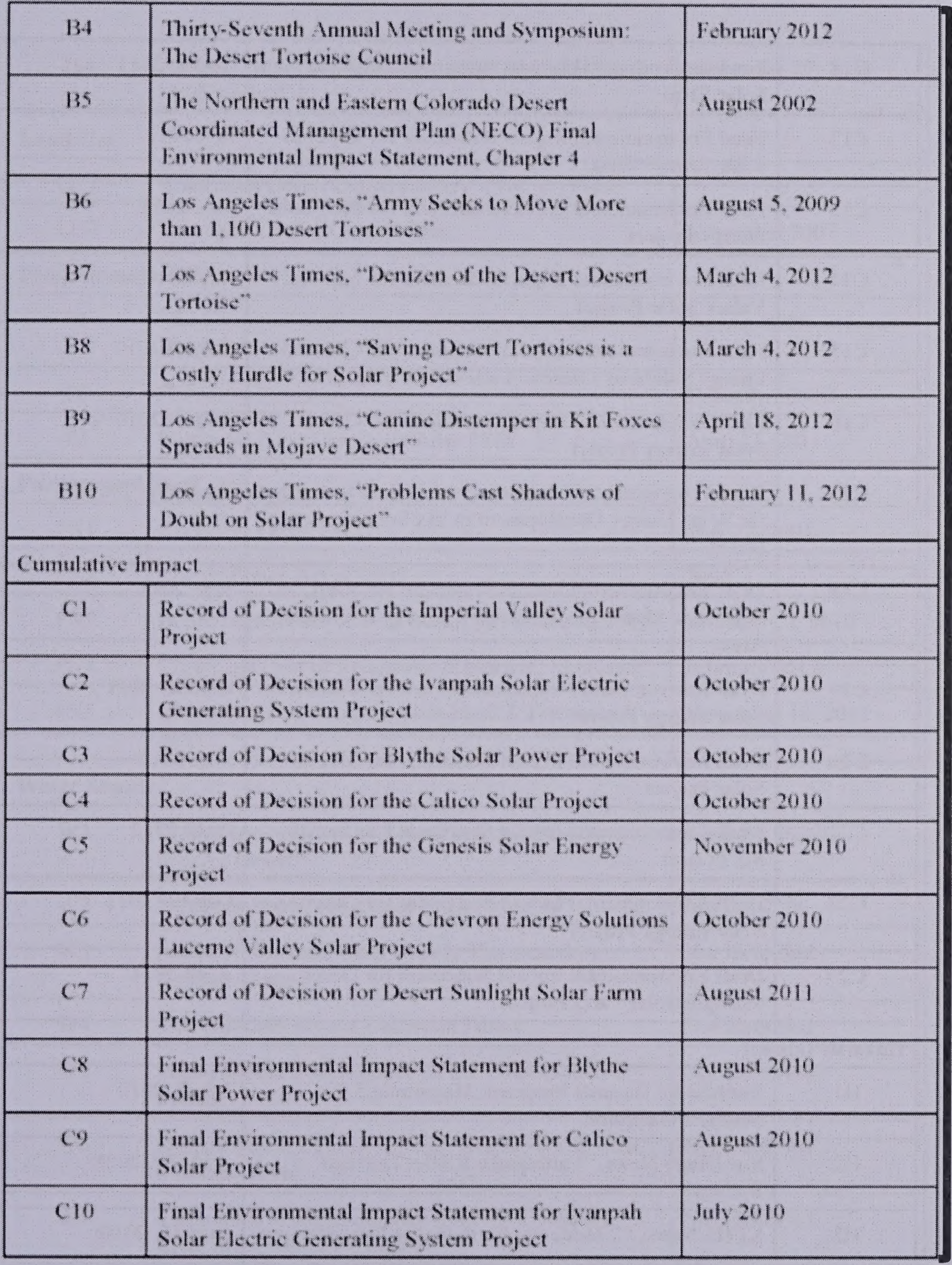
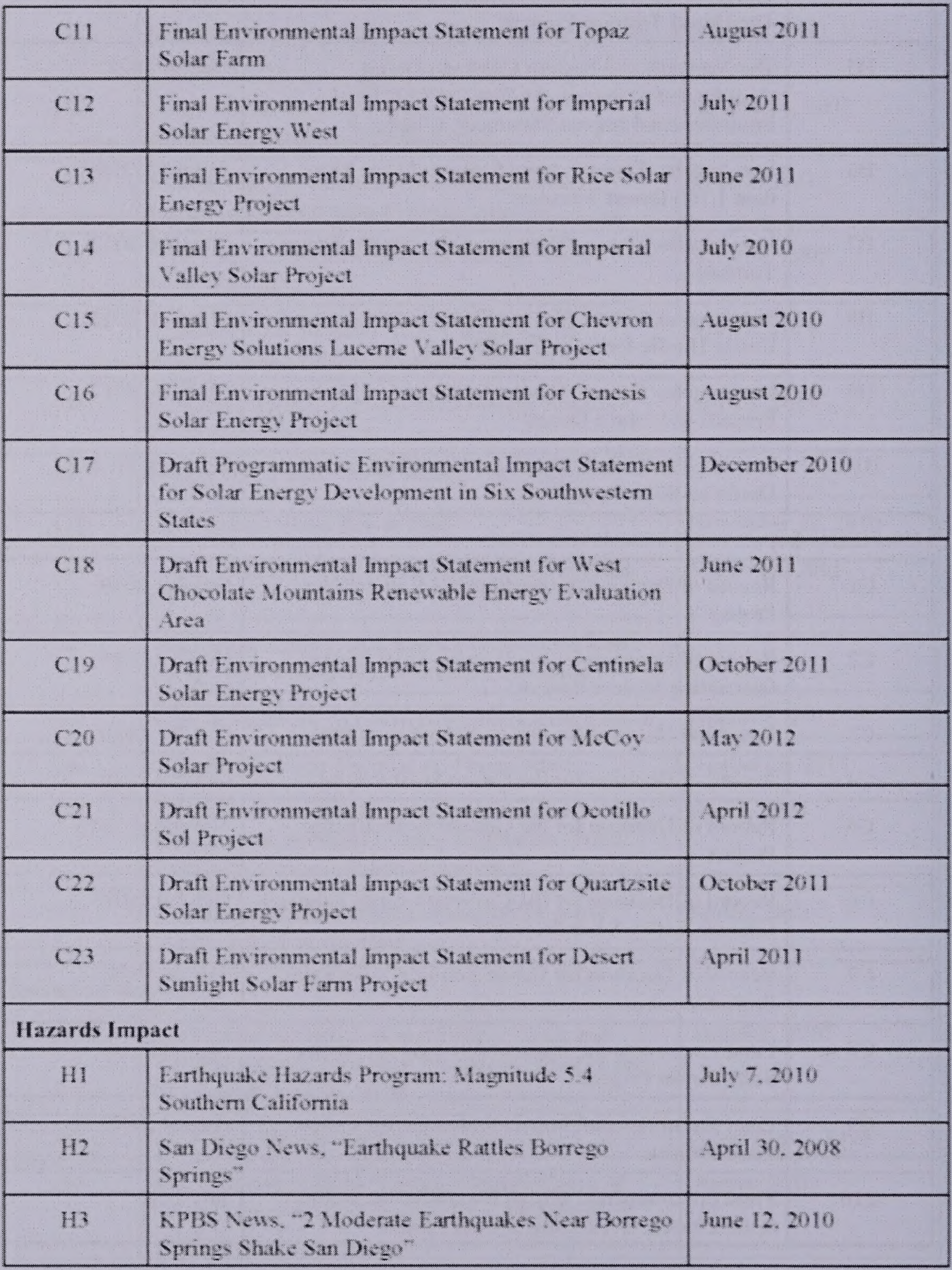


B4	Thirty-Seventh Annual Meeting and Symposium: The Desert Tortoise Council	February 2012
B5	The Northern and Eastern Colorado Desert Coordinated Management Plan (NECO) Final Environmental Impact Statement, Chapter 4	August 2002
B6	Los Angeles Times, "Army Seeks to Move More than 1,100 Desert Tortoises"	August 5, 2009
B7	Los Angeles Times, "Denizen of the Desert: Desert Tortoise"	March 4, 2012
B8	Los Angeles Times, "Saving Desert Tortoises is a Costly Hurdle for Solar Project"	March 4, 2012
B9	Los Angeles Times, "Canine Distemper in Kit Foxes Spreads in Mojave Desert"	April 18, 2012
B10	Los Angeles Times, "Problems Cast Shadows of Doubt on Solar Project"	February 11, 2012
Cumulative Impact		
C1	Record of Decision for the Imperial Valley Solar Project	October 2010
C2	Record of Decision for the Ivanpah Solar Electric Generating System Project	October 2010
C3	Record of Decision for Blythe Solar Power Project	October 2010
C4	Record of Decision for the Calico Solar Project	October 2010
C5	Record of Decision for the Genesis Solar Energy Project	November 2010
C6	Record of Decision for the Chevron Energy Solutions Lucerne Valley Solar Project	October 2010
C7	Record of Decision for Desert Sunlight Solar Farm Project	August 2011
C8	Final Environmental Impact Statement for Blythe Solar Power Project	August 2010
C9	Final Environmental Impact Statement for Calico Solar Project	August 2010
C10	Final Environmental Impact Statement for Ivanpah Solar Electric Generating System Project	July 2010

B011-18 cont.

COMMENT SET B011, CONT.
BRIGGS LAW CORPORATION, REPRESENTING CARE AND LA CUNA DE AZATLAN SACRED SITES PROTECTION CIRCLE ADVISORY COMMITTEE



C11	Final Environmental Impact Statement for Topaz Solar Farm	August 2011
C12	Final Environmental Impact Statement for Imperial Solar Energy West	July 2011
C13	Final Environmental Impact Statement for Rice Solar Energy Project	June 2011
C14	Final Environmental Impact Statement for Imperial Valley Solar Project	July 2010
C15	Final Environmental Impact Statement for Chevron Energy Solutions Lucerne Valley Solar Project	August 2010
C16	Final Environmental Impact Statement for Genesis Solar Energy Project	August 2010
C17	Draft Programmatic Environmental Impact Statement for Solar Energy Development in Six Southwestern States	December 2010
C18	Draft Environmental Impact Statement for West Chocolate Mountains Renewable Energy Evaluation Area	June 2011
C19	Draft Environmental Impact Statement for Centinela Solar Energy Project	October 2011
C20	Draft Environmental Impact Statement for McCoy Solar Project	May 2012
C21	Draft Environmental Impact Statement for Ocotillo Sol Project	April 2012
C22	Draft Environmental Impact Statement for Quartzsite Solar Energy Project	October 2011
C23	Draft Environmental Impact Statement for Desert Sunlight Solar Farm Project	April 2011
Hazards Impact		
H1	Earthquake Hazards Program: Magnitude 5.4 Southern California	July 7, 2010
H2	San Diego News, "Earthquake Rattles Borrego Springs"	April 30, 2008
H3	KPBS News, "2 Moderate Earthquakes Near Borrego Springs Shake San Diego"	June 12, 2010

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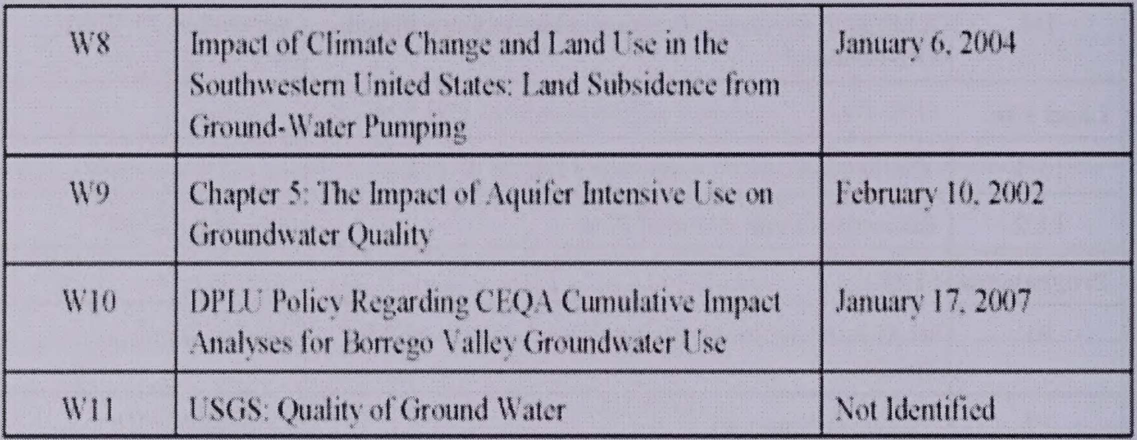
COMMENT SET B011, CONT.
BRIGGS LAW CORPORATION, REPRESENTING CARE AND LA CUNA DE AZATLAN SACRED SITES PROTECTION CIRCLE ADVISORY COMMITTEE

B011-18 cont.

H4	KESQ, "High Desert Residents Aim to Curb Illegal Off-Roading"	September 27, 2011
Land Use		
LU1	California Desert Conservation ("CDCA") Plan	
LU2	Riverside County General Plan	November 2007
Programmatic EIS		
P1	BLM National Environmental Policy Act Handbook H-1790-1	January 2008
P2	Executive Summary	December 2010
P3	Comment Period for Draft Solar PEIS	April 13, 2011
Purpose and Need		
PN1	Executive Order 13212	May 22, 2001
PN2	Energy Policy Act of 2005	2005
PN3	Department of the Interior Secretarial Order 3285A1	February 22, 2010
PN4	"The High Cost of Renewable-Electricity Mandates"	February 2012
PN5	Concurrence of Commissioner Mark J. Ferron on E-4433	November 10, 2011
Water Supply		
W1	"Park Service Warns of Solar Projects' Impacts to Mojave Desert"	April 23, 2009
W2	"Western Reservoirs Could be Dry by 2050"	July 20, 2009
W3	Future of Western Water Supply Threatened by Climate Change	Not Identified
W4	The Colorado River's Uncertain Future	Not Identified
W5	Managing the Uncertainties on the Colorado River System	Not Identified
W6	Scripps News: Climate Change Means Shortfalls in Colorado River	Not Identified
W7	Sustainable Water Deliveries from the Colorado River in a Changing Climate	Not Identified

COMMENT SET B011, CONT.
BRIGGS LAW CORPORATION, REPRESENTING CARE AND LA CUNA DE AZATLAN SACRED SITES PROTECTION CIRCLE ADVISORY COMMITTEE



W8	Impact of Climate Change and Land Use in the Southwestern United States: Land Subsidence from Ground-Water Pumping	January 6, 2004
W9	Chapter 5: The Impact of Aquifer Intensive Use on Groundwater Quality	February 10, 2002
W10	DPLU Policy Regarding CEQA Cumulative Impact Analyses for Borrego Valley Groundwater Use	January 17, 2007
W11	USGS: Quality of Ground Water	Not Identified

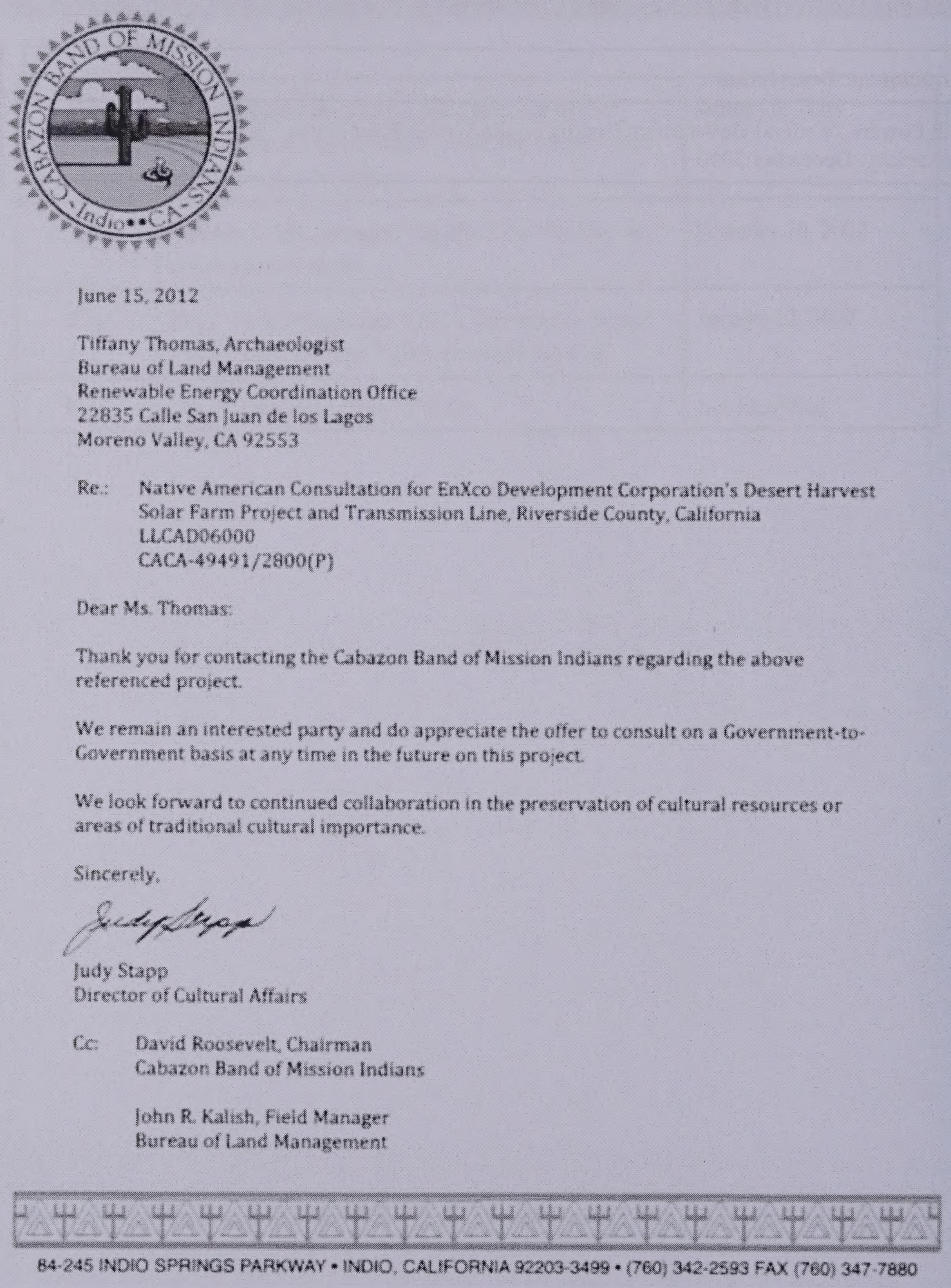
B011-18

COMMENT SET B011, CONT.
BRIGGS LAW CORPORATION, REPRESENTING CARE AND LA CUNA DE AZATLAN SACRED SITES PROTECTION CIRCLE ADVISORY COMMITTEE

Attachment Description
Bill Powers, "Federal Government Betting on the Wrong Solar Horse," *Natural Gas & Electricity,* December 2010.

B011-19

COMMENT SET C001
CABAZON BAND OF MISSION INDIANS



June 15, 2012

Tiffany Thomas, Archaeologist
Bureau of Land Management
Renewable Energy Coordination Office
22835 Calle San Juan de los Lagos
Moreno Valley, CA 92553

Re.: Native American Consultation for EnXco Development Corporation's Desert Harvest Solar Farm Project and Transmission Line, Riverside County, California
LLCAD06000
CACA-49491/2800(P)

C001-1

Dear Ms. Thomas:

Thank you for contacting the Cabazon Band of Mission Indians regarding the above referenced project.

We remain an interested party and do appreciate the offer to consult on a Government-to-Government basis at any time in the future on this project.

We look forward to continued collaboration in the preservation of cultural resources or areas of traditional cultural importance.

Sincerely,

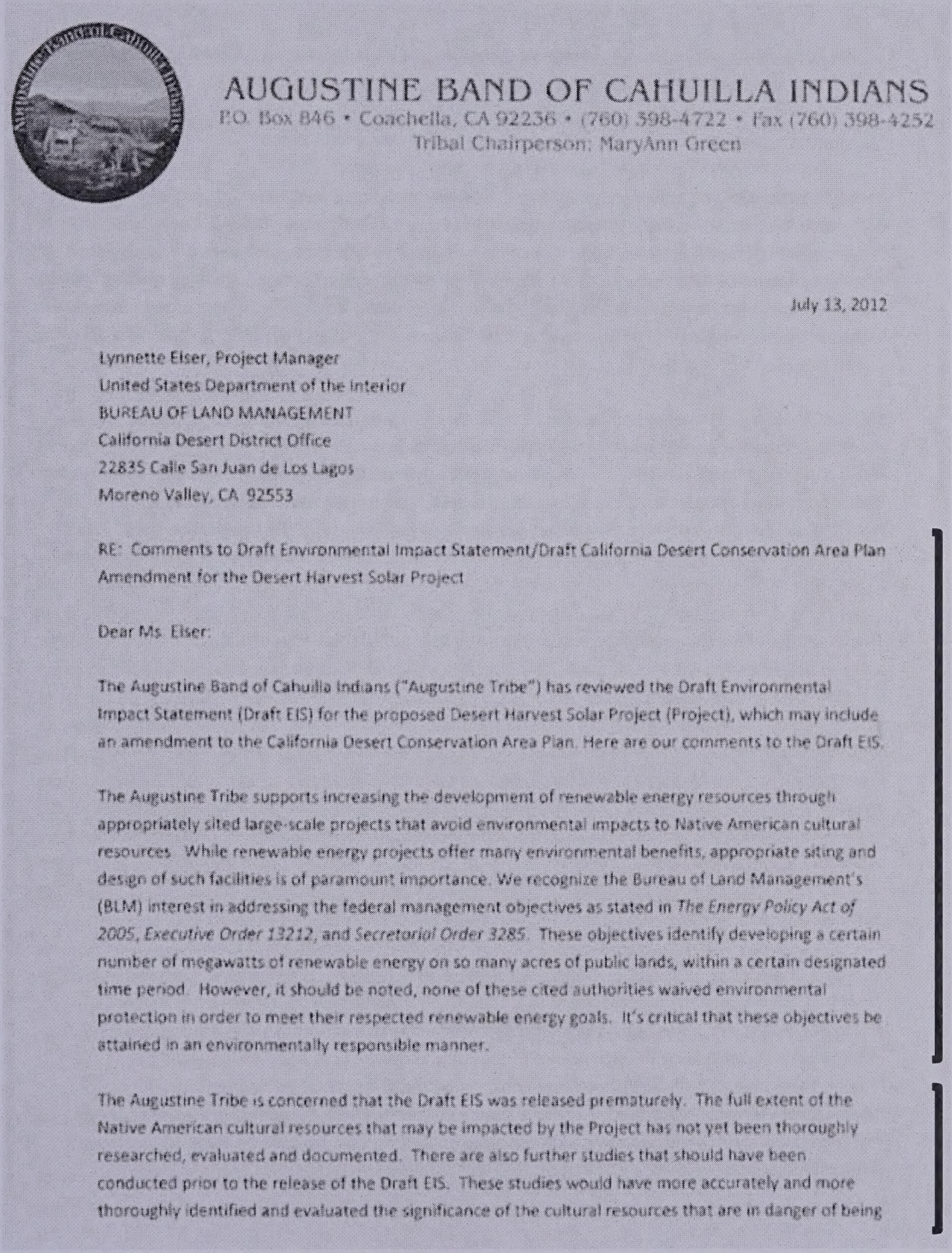
Judy Stapp
Director of Cultural Affairs

Cc: David Roosevelt, Chairman
Cabazon Band of Mission Indians

John R. Kalish, Field Manager
Bureau of Land Management

84-245 INDIO SPRINGS PARKWAY • INDIO, CALIFORNIA 92203-3499 • (760) 342-2593 FAX (760) 347-7880

COMMENT SET C002
AUGUSTINE BAND OF CAHUILA INDIANS



AUGUSTINE BAND OF CAHUILLA INDIANS
P.O. Box 846 • Coachella, CA 92236 • (760) 398-4722 • Fax (760) 398-4252
Tribal Chairperson: MaryAnn Green

July 13, 2012

Lynnette Elser, Project Manager
United States Department of the Interior
BUREAU OF LAND MANAGEMENT
California Desert District Office
22835 Calle San Juan de Los Lagos
Moreno Valley, CA 92553

C002-1

RE: Comments to Draft Environmental Impact Statement/Draft California Desert Conservation Area Plan Amendment for the Desert Harvest Solar Project

Dear Ms. Elser:

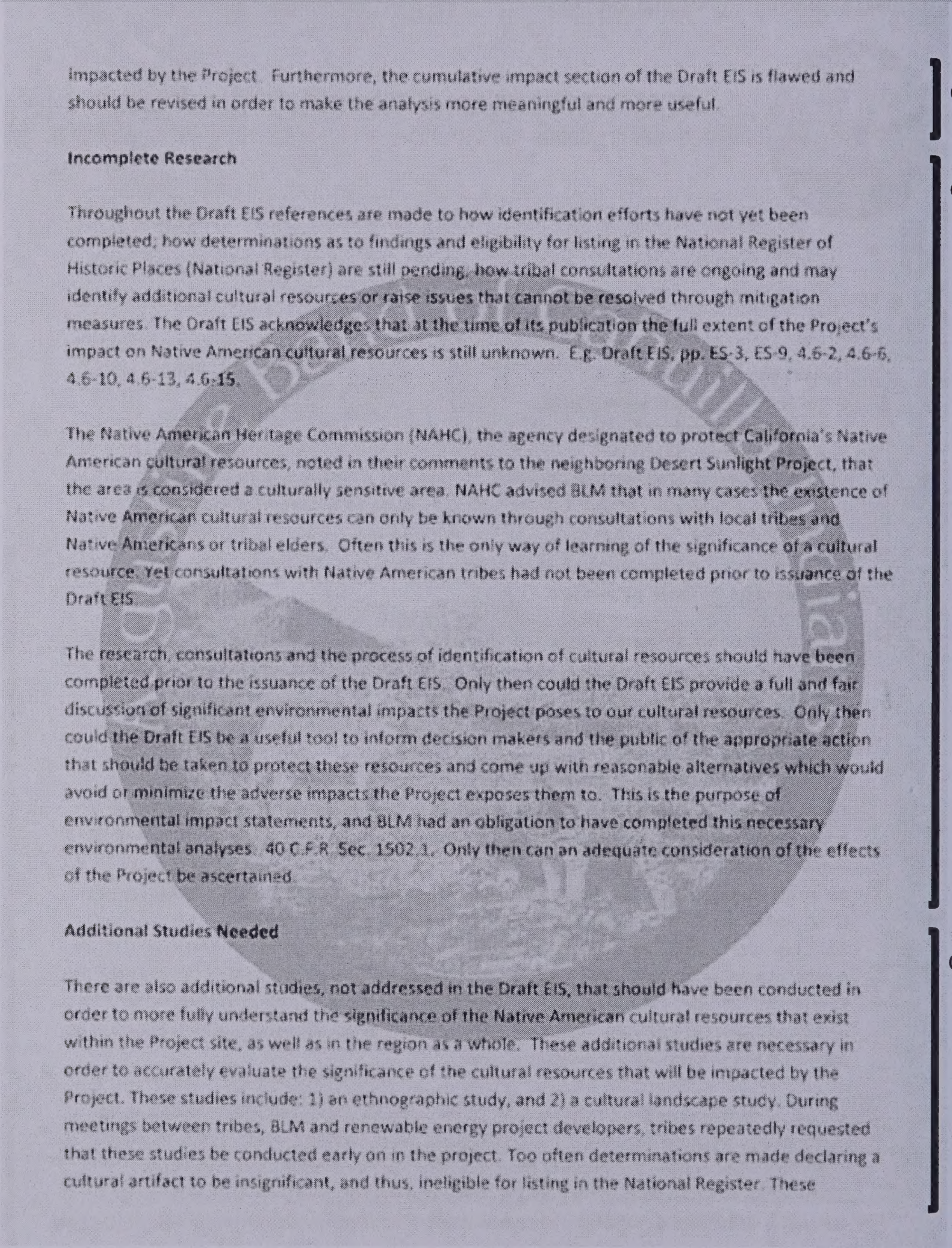
The Augustine Band of Cahuilla Indians ("Augustine Tribe") has reviewed the Draft Environmental Impact Statement (Draft EIS) for the proposed Desert Harvest Solar Project (Project), which may include an amendment to the California Desert Conservation Area Plan. Here are our comments to the Draft EIS.

The Augustine Tribe supports increasing the development of renewable energy resources through appropriately sited large-scale projects that avoid environmental impacts to Native American cultural resources. While renewable energy projects offer many environmental benefits, appropriate siting and design of such facilities is of paramount importance. We recognize the Bureau of Land Management's (BLM) interest in addressing the federal management objectives as stated in *The Energy Policy Act of 2005*, *Executive Order 13212*, and *Secretarial Order 3285*. These objectives identify developing a certain number of megawatts of renewable energy on so many acres of public lands, within a certain designated time period. However, it should be noted, none of these cited authorities waived environmental protection in order to meet their respected renewable energy goals. It's critical that these objectives be attained in an environmentally responsible manner.

C002-2

The Augustine Tribe is concerned that the Draft EIS was released prematurely. The full extent of the Native American cultural resources that may be impacted by the Project has not yet been thoroughly researched, evaluated and documented. There are also further studies that should have been conducted prior to the release of the Draft EIS. These studies would have more accurately and more thoroughly identified and evaluated the significance of the cultural resources that are in danger of being

COMMENT SET C002, CONT.
AUGUSTINE BAND OF CAHUILA INDIANS



C002-2 C

impacted by the Project. Furthermore, the cumulative impact section of the Draft EIS is flawed and should be revised in order to make the analysis more meaningful and more useful.

C002-3

Incomplete Research

Throughout the Draft EIS references are made to how identification efforts have not yet been completed; how determinations as to findings and eligibility for listing in the National Register of Historic Places (National Register) are still pending, how tribal consultations are ongoing and may identify additional cultural resources or raise issues that cannot be resolved through mitigation measures. The Draft EIS acknowledges that at the time of its publication the full extent of the Project's impact on Native American cultural resources is still unknown. E.g. Draft EIS, pp. ES-3, ES-9, 4.6-2, 4.6-6, 4.6-10, 4.6-13, 4.6-15.

The Native American Heritage Commission (NAHC), the agency designated to protect California's Native American cultural resources, noted in their comments to the neighboring Desert Sunlight Project, that the area is considered a culturally sensitive area. NAHC advised BLM that in many cases the existence of Native American cultural resources can only be known through consultations with local tribes and Native Americans or tribal elders. Often this is the only way of learning of the significance of a cultural resource. Yet consultations with Native American tribes had not been completed prior to issuance of the Draft EIS.

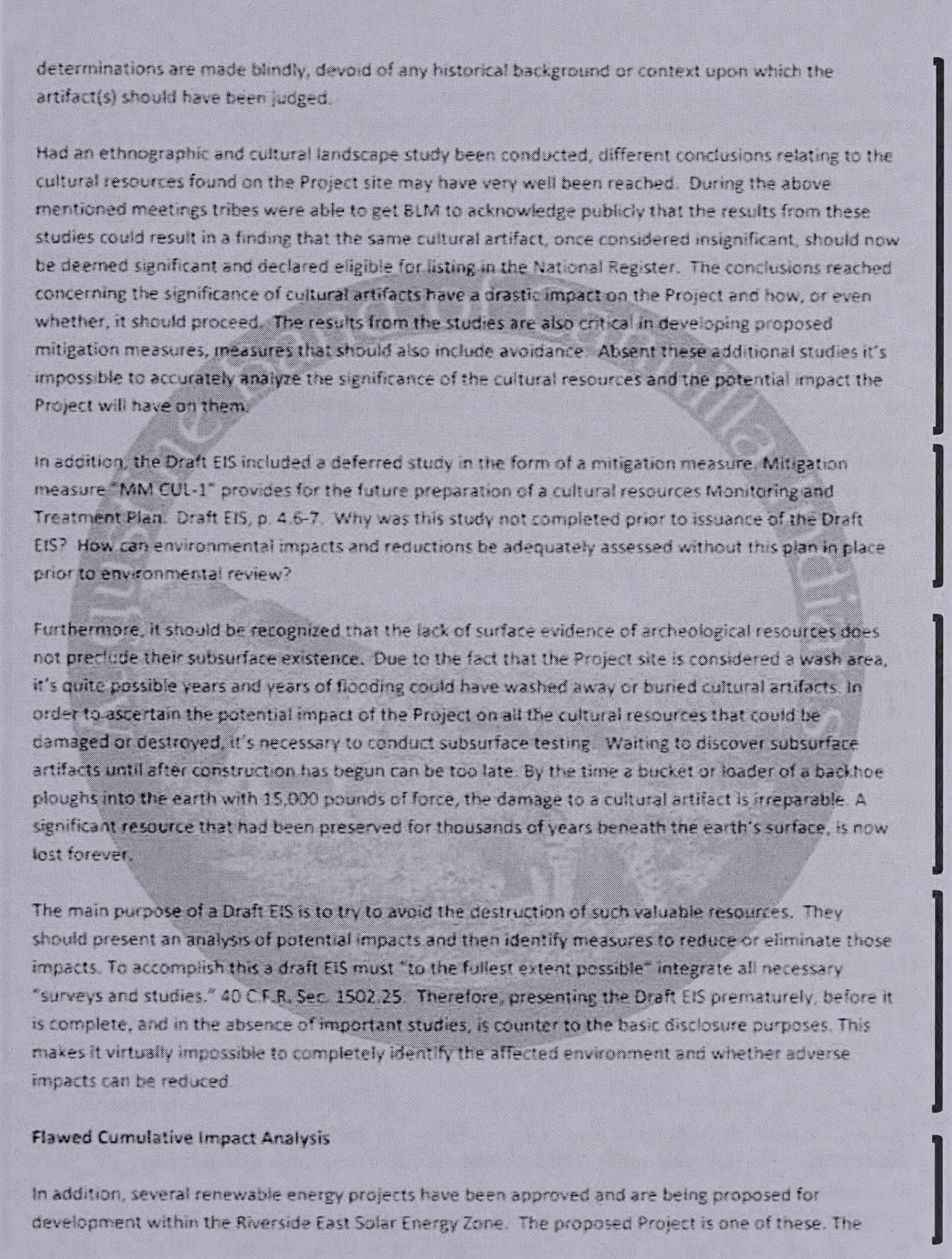
The research, consultations and the process of identification of cultural resources should have been completed prior to the issuance of the Draft EIS. Only then could the Draft EIS provide a full and fair discussion of significant environmental impacts the Project poses to our cultural resources. Only then could the Draft EIS be a useful tool to inform decision makers and the public of the appropriate action that should be taken to protect these resources and come up with reasonable alternatives which would avoid or minimize the adverse impacts the Project exposes them to. This is the purpose of environmental impact statements, and BLM had an obligation to have completed this necessary environmental analyses. 40 C.F.R. Sec. 1502.1. Only then can an adequate consideration of the effects of the Project be ascertained.

C002-4

Additional Studies Needed

There are also additional studies, not addressed in the Draft EIS, that should have been conducted in order to more fully understand the significance of the Native American cultural resources that exist within the Project site, as well as in the region as a whole. These additional studies are necessary in order to accurately evaluate the significance of the cultural resources that will be impacted by the Project. These studies include: 1) an ethnographic study, and 2) a cultural landscape study. During meetings between tribes, BLM and renewable energy project developers, tribes repeatedly requested that these studies be conducted early on in the project. Too often determinations are made declaring a cultural artifact to be insignificant, and thus, ineligible for listing in the National Register. These

COMMENT SET C002, CONT.
AUGUSTINE BAND OF CAHUILA INDIANS



determinations are made blindly, devoid of any historical background or context upon which the artifact(s) should have been judged.

Had an ethnographic and cultural landscape study been conducted, different conclusions relating to the cultural resources found on the Project site may have very well been reached. During the above mentioned meetings tribes were able to get BLM to acknowledge publicly that the results from these studies could result in a finding that the same cultural artifact, once considered insignificant, should now be deemed significant and declared eligible for listing in the National Register. The conclusions reached concerning the significance of cultural artifacts have a drastic impact on the Project and how, or even whether, it should proceed. The results from the studies are also critical in developing proposed mitigation measures, measures that should also include avoidance. Absent these additional studies it's impossible to accurately analyze the significance of the cultural resources and the potential impact the Project will have on them.

C002-4 Cont.

In addition, the Draft EIS included a deferred study in the form of a mitigation measure. Mitigation measure "MM CUL-1" provides for the future preparation of a cultural resources Monitoring and Treatment Plan. Draft EIS, p. 4.6-7. Why was this study not completed prior to issuance of the Draft EIS? How can environmental impacts and reductions be adequately assessed without this plan in place prior to environmental review?

C002-5

Furthermore, it should be recognized that the lack of surface evidence of archeological resources does not preclude their subsurface existence. Due to the fact that the Project site is considered a wash area, it's quite possible years and years of flooding could have washed away or buried cultural artifacts. In order to ascertain the potential impact of the Project on all the cultural resources that could be damaged or destroyed, it's necessary to conduct subsurface testing. Waiting to discover subsurface artifacts until after construction has begun can be too late. By the time a bucket or loader of a backhoe ploughs into the earth with 15,000 pounds of force, the damage to a cultural artifact is irreparable. A significant resource that had been preserved for thousands of years beneath the earth's surface, is now lost forever.

C002-6

The main purpose of a Draft EIS is to try to avoid the destruction of such valuable resources. They should present an analysis of potential impacts and then identify measures to reduce or eliminate those impacts. To accomplish this a draft EIS must "to the fullest extent possible" integrate all necessary "surveys and studies." 40 C.F.R. Sec. 1502.25. Therefore, presenting the Draft EIS prematurely, before it is complete, and in the absence of important studies, is counter to the basic disclosure purposes. This makes it virtually impossible to completely identify the affected environment and whether adverse impacts can be reduced.

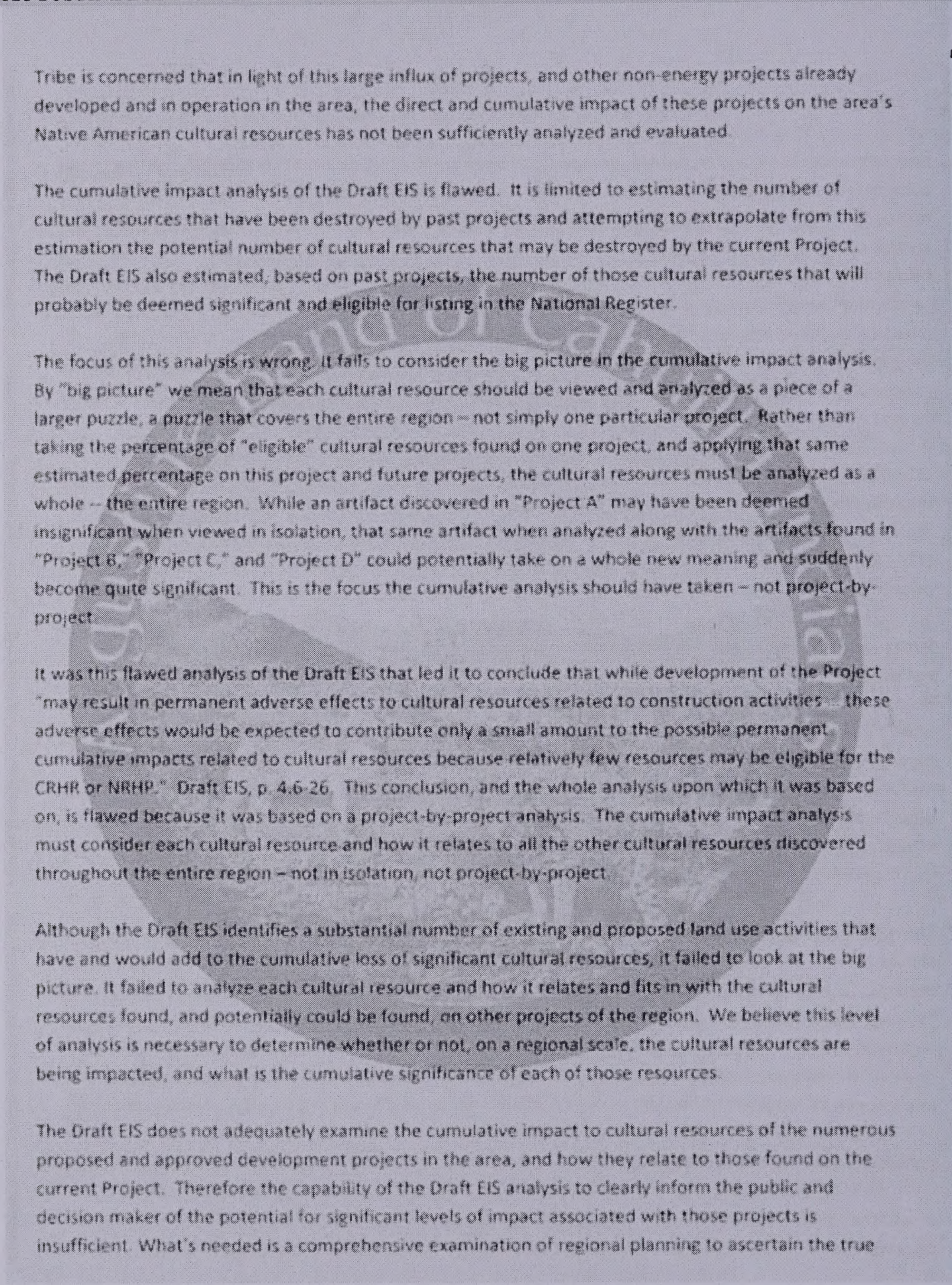
C002-7

Flawed Cumulative Impact Analysis

In addition, several renewable energy projects have been approved and are being proposed for development within the Riverside East Solar Energy Zone. The proposed Project is one of these. The

C002-8

COMMENT SET C002, CONT.
AUGUSTINE BAND OF CAHUILA INDIANS



C002-8 C

Tribe is concerned that in light of this large influx of projects, and other non-energy projects already developed and in operation in the area, the direct and cumulative impact of these projects on the area's Native American cultural resources has not been sufficiently analyzed and evaluated.

The cumulative impact analysis of the Draft EIS is flawed. It is limited to estimating the number of cultural resources that have been destroyed by past projects and attempting to extrapolate from this estimation the potential number of cultural resources that may be destroyed by the current Project. The Draft EIS also estimated, based on past projects, the number of those cultural resources that will probably be deemed significant and eligible for listing in the National Register.

The focus of this analysis is wrong. It fails to consider the big picture in the cumulative impact analysis. By "big picture" we mean that each cultural resource should be viewed and analyzed as a piece of a larger puzzle, a puzzle that covers the entire region – not simply one particular project. Rather than taking the percentage of "eligible" cultural resources found on one project, and applying that same estimated percentage on this project and future projects, the cultural resources must be analyzed as a whole -- the entire region. While an artifact discovered in "Project A" may have been deemed insignificant when viewed in isolation, that same artifact when analyzed along with the artifacts found in "Project B," "Project C," and "Project D" could potentially take on a whole new meaning and suddenly become quite significant. This is the focus the cumulative analysis should have taken – not project-by-project.

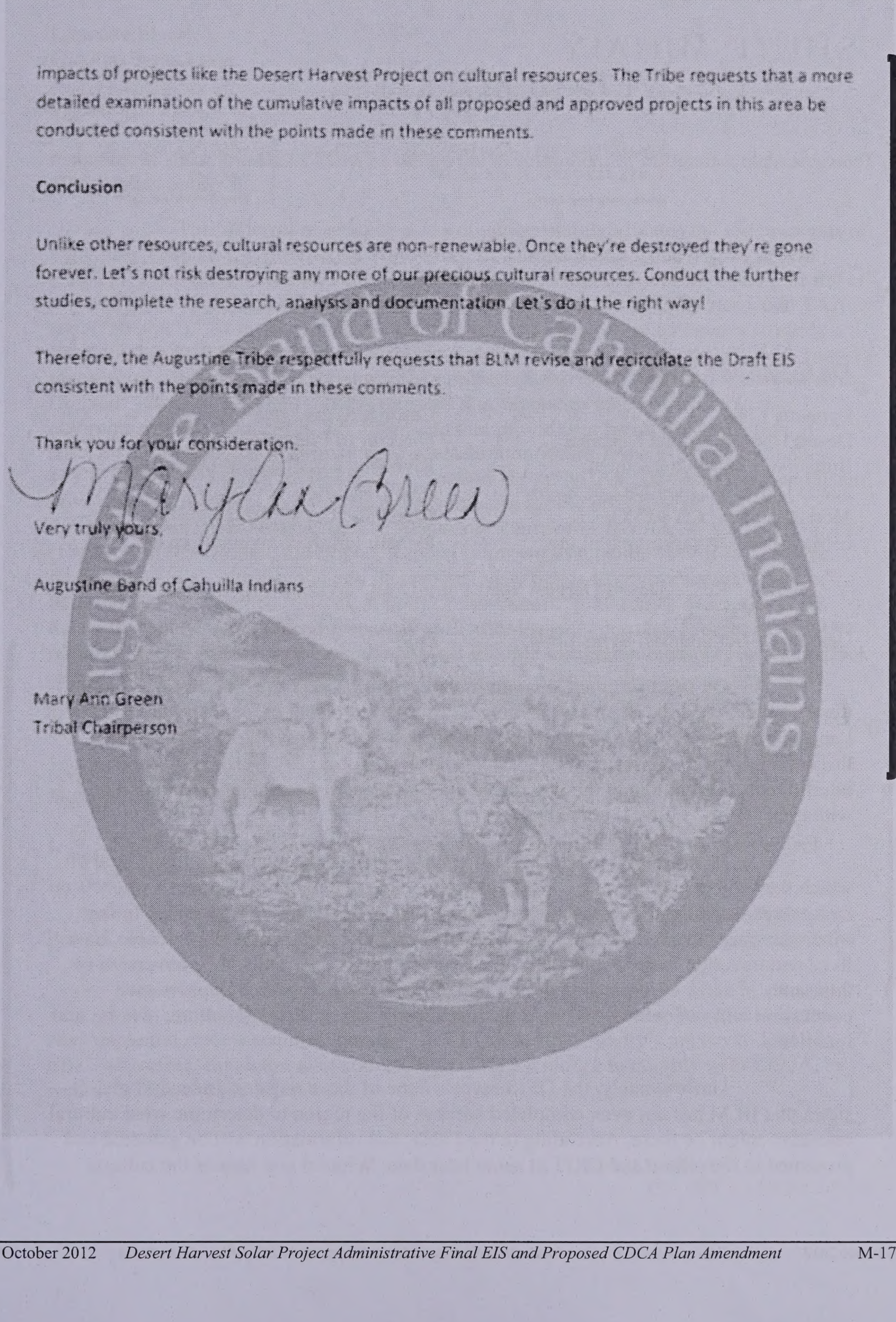
It was this flawed analysis of the Draft EIS that led it to conclude that while development of the Project "may result in permanent adverse effects to cultural resources related to construction activities ... these adverse effects would be expected to contribute only a small amount to the possible permanent cumulative impacts related to cultural resources because relatively few resources may be eligible for the CRHR or NRHP." Draft EIS, p. 4.6-26. This conclusion, and the whole analysis upon which it was based on, is flawed because it was based on a project-by-project analysis. The cumulative impact analysis must consider each cultural resource and how it relates to all the other cultural resources discovered throughout the entire region – not in isolation, not project-by-project.

Although the Draft EIS identifies a substantial number of existing and proposed land use activities that have and would add to the cumulative loss of significant cultural resources, it failed to look at the big picture. It failed to analyze each cultural resource and how it relates and fits in with the cultural resources found, and potentially could be found, on other projects of the region. We believe this level of analysis is necessary to determine whether or not, on a regional scale, the cultural resources are being impacted, and what is the cumulative significance of each of those resources.

C002-9

The Draft EIS does not adequately examine the cumulative impact to cultural resources of the numerous proposed and approved development projects in the area, and how they relate to those found on the current Project. Therefore the capability of the Draft EIS analysis to clearly inform the public and decision maker of the potential for significant levels of impact associated with those projects is insufficient. What's needed is a comprehensive examination of regional planning to ascertain the true

COMMENT SET C002, CONT.
AUGUSTINE BAND OF CAHUILLA INDIANS



impacts of projects like the Desert Harvest Project on cultural resources. The Tribe requests that a more detailed examination of the cumulative impacts of all proposed and approved projects in this area be conducted consistent with the points made in these comments.

C002-9 Cont.

Conclusion

Unlike other resources, cultural resources are non-renewable. Once they're destroyed they're gone forever. Let's not risk destroying any more of our precious cultural resources. Conduct the further studies, complete the research, analysis and documentation. Let's do it the right way!

Therefore, the Augustine Tribe respectfully requests that BLM revise and recirculate the Draft EIS consistent with the points made in these comments.

Thank you for your consideration.

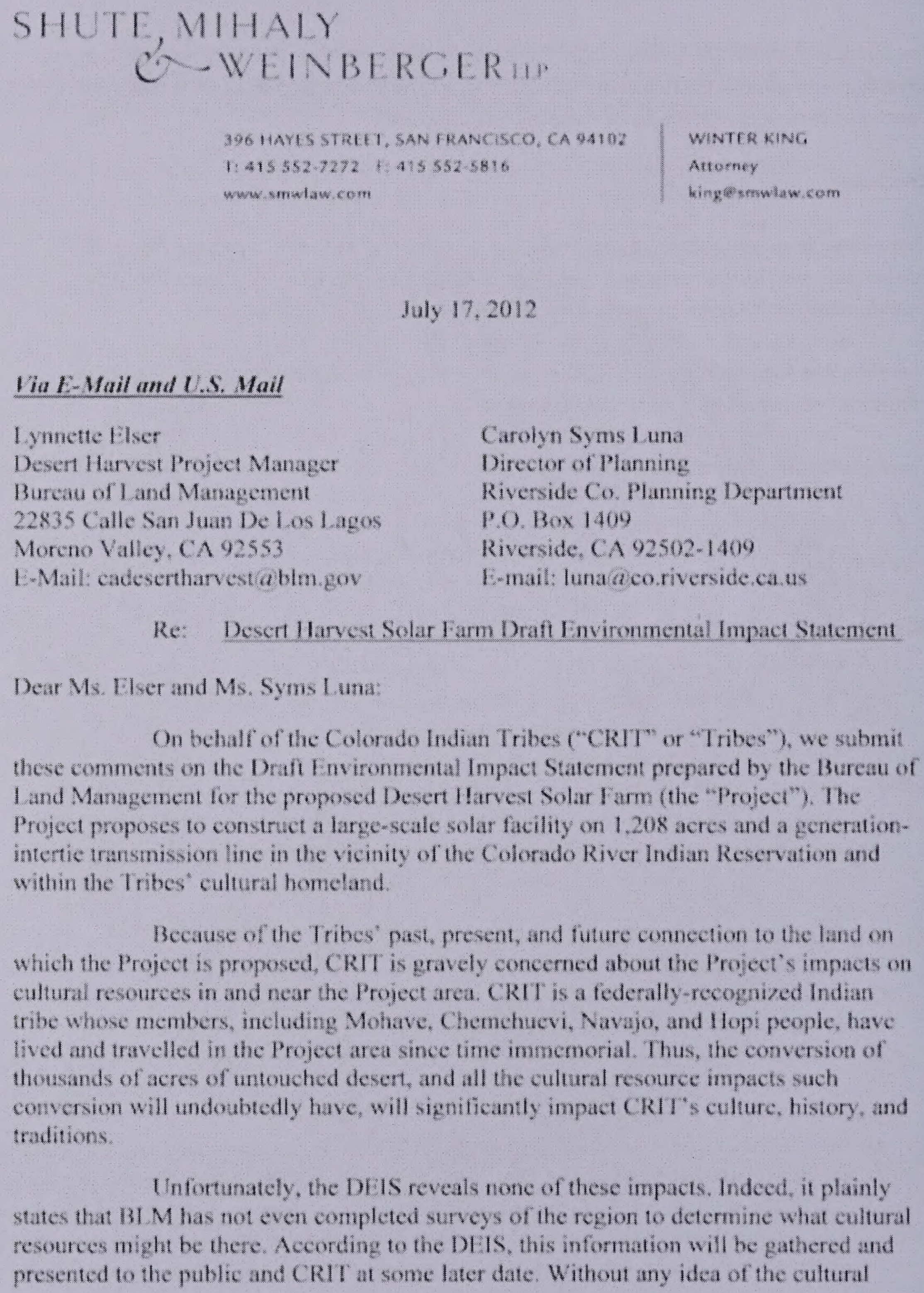
Very truly yours,

MaryAnn Green

Augustine Band of Cahuilla Indians

Mary Ann Green
Tribal Chairperson

COMMENT SET C003
SHUTE MIHALY & WEINBERGER LLP, REPRESENTING COLORADO INDIAN TRIBES



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July 17, 2012

Via E-Mail and U.S. Mail

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Re: Desert Harvest Solar Farm Draft Environmental Impact Statement

Dear Ms. Elser and Ms. Syms Luna:

C003-1

On behalf of the Colorado Indian Tribes ("CRIT" or "Tribes"), we submit these comments on the Draft Environmental Impact Statement prepared by the Bureau of Land Management for the proposed Desert Harvest Solar Farm (the "Project"). The Project proposes to construct a large-scale solar facility on 1,208 acres and a generation-intertie transmission line in the vicinity of the Colorado River Indian Reservation and within the Tribes' cultural homeland.

Because of the Tribes' past, present, and future connection to the land on which the Project is proposed, CRIT is gravely concerned about the Project's impacts on cultural resources in and near the Project area. CRIT is a federally-recognized Indian tribe whose members, including Mohave, Chemehuevi, Navajo, and Hopi people, have lived and travelled in the Project area since time immemorial. Thus, the conversion of thousands of acres of untouched desert, and all the cultural resource impacts such conversion will undoubtedly have, will significantly impact CRIT's culture, history, and traditions.

Unfortunately, the DEIS reveals none of these impacts. Indeed, it plainly states that BLM has not even completed surveys of the region to determine what cultural resources might be there. According to the DEIS, this information will be gathered and presented to the public and CRIT at some later date. Without any idea of the cultural

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resources at stake, the DEIS likewise defers the development of mitigation measures until after Project approval.

This deferral of analysis and mitigation plainly violates the requirements of either the National Environmental Policy Act, 42 United States Code § 4321 *et seq.* ("NEPA"), the California Environmental Quality Act, Public Resources Code § 21000 *et seq.* ("CEQA"), or the National Historic Preservation Act, 16 United States Code § 470 *et seq.* ("NHPA").[1] At the most basic level, all three statutes require an agency to study a resource that may be impacted by a project and to determine how the project will impact that resource *before* the agency approves a project. *Robertson v. Methow Valley Citizens Council.* 480 U.S. 332, 350 (NEPA requires that "agencies take a 'hard look at environmental consequences' [citation] and that provide for broad dissemination of relevant environmental information."); *Muckleshoot Indian Tribe v. U.S. Forest Serv.*, 177 F.3d 800, 805 (9th Cir. 1999) (" . . . Section 106 of NHPA is a 'stop, look, and listen' provision that requires each federal agency to consider the effects of its programs."); *Laurel Heights Improvement Assn. v. Regents of Univ. of California*, 47 Cal. 3d 376, 392 (1988) ("An [Environmental Impact Report] is an 'environmental 'alarm bell' whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return.' [citation]"). Here, the DEIS defers this analysis of cultural resources until after Project approval. Moreover, CEQA requires that an agency propose and adopt all feasible mitigation measures or alternatives to lessen the significant impacts. CEQA § 21002. The DEIS fails to meet these basic requirements.

These failings must be corrected and a revised DEIS circulated for public review. Moreover, given the Project's potentially significant impacts to cultural resources, CRIT urges BLM to deny it.

C003-2

I. BLM Has Not Determined What Cultural Resources Exist in the Project Area or to What Extent They Will Be Impacted.

The DEIS repeatedly states that BLM has not completed surveying the Project site for cultural resources, but instead proposes to present that information in the

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[1] It is our understanding that Riverside County intends to use this DEIS for the environmental review required pursuant to CEQA for the County's approval. DEIS at ES-2. Therefore, this letter also addresses the DEIS's failure to comply with CEQA, as well as NEPA and the NHPA.

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Final Environmental Impact Statement. DEIS at 3.6-1, 4.6-2, 4.6-4. There is no authority for deferring this analysis until a later date. Indeed, pursuant to NEPA, the DEIS must include information about "the degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources." 40 C.F.R. § 1508.27. Project approval at this stage, before the lead agencies have even studied the cultural resources at the site, undermines NEPA's informational purpose and creates the risk that the Project will impact tribal cultural resources that have yet to be identified. *See Conner v. Burford,* 848 F.2d 1441, 1446 (9th Cir.1988).

Moreover, the DEIS does not offer any explanation why BLM or Riverside County could not have conducted these surveys before the DEIS was completed and released for public comment. Both NEPA and CEQA require disclosure of environmental impacts early on in the process. *State of Cal. v. Block*, 690 F.2d 753, 761 (9th Cir. 1982) ("NEPA requires that the evaluation of a project's environmental consequences take place at an early stage in the project's planning process."); *Found. for N. Am. Wild Sheep v. U.S. Dept. of Agr.*, 681 F.2d 1172, 1181 (9th Cir. 1982) ("NEPA expresses a Congressional determination that procrastination on environmental concerns is no longer acceptable"); *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Rancho Cordova,* 40 Cal. 4th 412, 441 (2007) ("CEQA's informational purpose is not satisfied by simply stating information will be provided in the future (internal quotation omitted)). CEQA specifically recognizes that a public agency must preparing the environmental review document "as early as feasible in the planning process" but "late enough to provide meaningful information for environmental assessment." Cal. Code Regs. § 15004(b). Without completed studies of cultural resources on the Project site, meaningful information is lacking and the public and decisionmakers are unable to evaluate the full impacts of the Project.

C003-3

Finally, the DEIS focuses almost entirely on cultural resources that are also archeological in nature. While impacts on archaeological resources are important, the DEIS must also analyze and consult with the Tribes regarding the Project's potential impacts on other traditional cultural properties, such as sacred sites. For instance, the Salt Songs of the Chemehuevi people, which describe significant places such as sacred areas and cultural landscapes, include the McCoy Mountains. The DEIS states that the Project will be visible from the McCoy Mountains (DEIS at 3.14-4), but does not mention the impact of this visual impairment on Tribal members. BLM should consult with the Tribes regarding this and other important places and revise the DEIS to analyze the Project's impacts.

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II. The DEIS Improperly Defers the Development of "Mitigation" for Cultural Resource Impacts.

BLM's failure to survey the Project area for cultural resources has also thwarted BLM's ability to propose measures to mitigate the Project's impacts. Both NEPA and the NHPA require an agency to consider measures to lessen or avoid Project impacts. 42 U.S.C. § 4332(2)(C); 36 C.F.R. § 800.1. In addition, CEQA prohibits a public agency from approving a project "if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects." CEQA § 21002. Without knowing what cultural resources exist at the Project site, the agencies cannot consider, much less adopt, measures or alternatives that lessen or avoid the Project's impacts to those resources.

Moreover, both the NHPA and the proposed Monitoring and Treatment Plan contemplate that cultural resources should be avoided if possible. DEIS 3.6-2, 4.6-8; 36 C.F.R. § 800.6. However, if the Project is planned and approved before any substantive cultural resources analysis is complete, it will be practically impossible to modify those plans later to avoid resources once they are found. This cart-before-the-horse approach resulted in serious problems and conflicts at the Genesis Solar Energy Project when scores of buried artifacts were found in a 100-acre area of the Project site during project construction. Following the discovery, the project applicant argued to BLM that it would be economically infeasible to avoid the resources at that point because the Project had already been approved and was in the midst of construction. BLM apparently concurred. As a result, those cultural artifacts, which are sacred to the Tribes and which the Tribes believe should not be disturbed, continue to be unearthed and damaged on a daily basis by project grading. As is clear from this experience, the only way to avoid areas where cultural resources exist are to determine where those areas are *before* Project approval.

The DEIS's lack of information about Project impacts is reflected in its vague, yet-to-be-developed mitigation measures. The principle measure proposed in the DEIS to mitigate for impacts to cultural resources is the preparation and implementation of a Monitoring and Treatment Plan, Mitigation Measure CUL-2. DEIS at 4.6-7. According to the DEIS, this mitigation will include development and implementation of a Memorandum of Agreement ("MOA") and a Historic Properties Treatment Plan

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("HPTP").[2] The Monitoring and Treatment Plan, the MOA, and the HPTP (collectively, the "Plans") have yet to be developed, however.

Deferring the development of mitigation measures in this way is strictly prohibited under CEQA. An environmental review document must describe feasible mitigation measures at the time of project approval; "formulation of mitigation measures should not be deferred until some future time." Cal. Code Regs. § 15126.4(a)(1)(B). Deferral is permitted only in narrow circumstances where the agency provides "specific and mandatory performance standards to ensure that the measures, as implemented, will be effective." *Citizens for a Better Environment v. City of Richmond*, 184 Cal.App.4th 70, 94 (2010) (rejecting mitigation measures for greenhouse gas emissions that merely required applicant to create a plan). The DEIS does not give any reason why the Plans could not be developed before Project approval. Nor does the DEIS include any performance standards for determining whether the Plans would sufficiently mitigate the loss of cultural resources. Thus, the DEIS unlawfully defers mitigation in violation of CEQA.

Additionally, because the DEIS defers both analysis and mitigation of cultural resources, it does not determine whether impacts to cultural resources will be mitigated to a less than significant level. DEIS at 4.6-28 ("*some* of the impacts to cultural resources would be mitigated to less than significant levels under CEQA . . ." (emphasis added)). CEQA provides that an agency can only approve a project with significant impacts if there are no feasible mitigation measures or alternatives and if the agency determines that the benefits of the project outweigh the impacts. Cal. Code Regs. §15043. Here, the DEIS concludes that it cannot determine if impacts to cultural resources from the Project are satisfactorily mitigated, "primarily because identification efforts have not been completed for this project." DEIS at 4.6-10. As a result, based on this DEIS, Riverside County cannot possibly comply with CEQA's substantive mandate.

C003-5

III. The DEIS Fails to Include Information Regarding BLM's Ongoing Obligation to Consult With the Tribes.

Under section 106 of the NHPA, federal agencies must take into account the effect of their actions on historic and cultural resources. 16 U.S.C. § 470f. One of the primary mechanisms for the ongoing protection of these cultural resources is through

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[2] The DEIS is unclear how and if the Monitoring and Treatment Plan is related to the MOA and HPTP. BLM must revise the DEIS to clarify this point.

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C003-5 cont.

consultation with Tribes, with the goal of identifying cultural resources and historic properties potentially affected by a federally approved project, assessing the project's effects, and seeking ways to avoid, minimize, or mitigate. 36 C.F.R. § 800.1(a). It is the "statutory obligation" of BLM to fulfill the consultation requirements of NHPA section 106. 36 C.F.R. § 800.2(a).

Although the DEIS mentions that BLM has initially consulted with Native American Tribes, including CRIT, the DEIS is vague regarding how the agency will continue to consult with Tribal governments as it completes its obligations under NHPA section 106. *See* DEIS at ES-3 ("Consultation with Indian Tribes on this project is ongoing."). It appears that BLM intends to develop an MOA with the developer. DEIS at 4.6-28; *see* 36 C.F.R. § 800.6(c) (noting that an executed and implemented memorandum of agreement "evidences the agency official's compliance with section 106 and [subpart B]"). CRIT is concerned, however, that BLM has not adequately consulted with the Tribes during the process leading up to the execution of an MOA, as federal law requires. *See, e.g.*, 36 C.F.R. § 800.2(c)(2)(ii); *see also Quechan Tribe of the Fort Yuma Indian Reservation v. U.S. Dep't of Interior*, No. 10cv2241-LAB, at 5 (S.D. Cal. Dec. 15, 2010) ("Section 800.4 alone requires at least seven issues about which [a tribe], as a consulting party, is entitled to be consulted before the project [is] approved."). BLM must provide CRIT, in a revised DEIS or elsewhere, with the specific procedures that agency will follow to fulfill its ongoing obligation to consult.

CRIT requests that BLM continue to engage in meaningful consultation with the Tribes as it develops the MOA, that BLM invite the Tribes to be a signatory to the MOA, and that BLM continue to consult with the Tribes as it develops an HPTP. Furthermore, the DEIS should be revised to make clear that BLM shall consult with the Tribal governments, including CRIT, when reviewing and approving the Monitoring and Treatment Plan. *See* DEIS at 4.6-7. Finally, CRIT representatives should be included in any walk-overs or surveys of the area that are conducted during the process to gather information or prepare the Plans. Members of the Tribes will serve as invaluable resources to help interpret and guide BLM's study of cultural resources.

C003-6

IV. The DEIS' Cumulative Effects Analysis Relies Upon Modeling That Has Proven To Be Inaccurate.

The DEIS bases its cumulative effects analysis on the assumption that any given project in the area will unearth on average 0.019 cultural resources per acre and 0.002 potentially eligible resources per acre ("Average Density Calculation"). DEIS at 4.6-21 (averages were derived from projects along the I-10 Corridor); *Id.* at 4.6-25 (determining that the I-10 Corridor average "serves as a reasonable minimum" for the

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Southern California Desert Region). Recent experience on similar projects, however, indicates how flawed this methodology is.

For example, the DEIS states that "during the construction of [] three linear [i.e., transmission line] projects approximately 348 acres were disturbed, and 7 cultural resources were destroyed, 1 of which was likely to be eligible for the [National Register of Historic Places] and the [California Register of Historical Resources] (historic property)." DEIS at 4.6-23. This analysis fails to mention, however, that at one of the linear projects, the Devers–Palo Verde Transmission Line Project, human remains were discovered. These remains were believed to be Mohave, one of CRIT's constituent tribes. When CRIT members and other went to perform a reburial ceremony at the site, more remains were uncovered. The disturbance of these remains is a "significant impact" to CRIT's members, causing them substantial physical, emotional, and spiritual harm. Clearly, the averaging methodology used in the DEIS is inadequate to predict the potential for significant cultural resource impacts or to take into account the acute spiritual and cultural harm caused by such disturbances.

Likewise, these "averages" would not have predicted the significant cultural impacts caused by the Genesis Solar Energy Project ("GSEP"). During construction of the GSEP, hundreds of cultural resources have been uncovered in a 100-acre area, far exceeding the Average Density Calculation. This discovery, like the discovery of the burial site, proves that analyzing impacts to cultural resources based upon an Average Density Calculation is an unreliable indicator. Cultural resources are not evenly scattered in an area, but rather tend to be concentrated. Moreover, the disturbance of even one burial site or other sacred object is a significant impact to the descendants of the people who left these objects behind. Therefore, when a Project disturbs, damages, and destroys artifacts, the significance of the impact is greater than what the Average Density Calculation suggests.

NEPA does not permit an agency to rely upon an assumption that has proven to be false. *Native Ecosystems Council v. U.S. Forest Serv.*, 418 F.3d 953, 964 (9th Cir. 2005) ("To take the required 'hard look' at a proposed project's effects, an agency may not rely on incorrect assumptions or data in an EIS."). Therefore, BLM must reevaluate the cumulative impact analysis to consider the fact that projects in the area have already, and will likely continue to, unearth, damage, and destroy concentrated areas where cultural resources are located.

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C003-7

V. The DEIS Fails to Consider the Impacts to Native Vegetation as Cultural Resource Impacts.

In addition to the Tribes' concerns over the unearthing and destruction of artifacts, CRIT is concerned about the harm to certain biological resources that are important to their culture. The DEIS does not discuss the impact to plants as a cultural resource impact. The Creosote Brush Scrub (*Larrea Tridentata*) in particular is valuable to the Tribes, both medicinally and aesthetically. For centuries it has been utilized and respected for its cleansing and healing properties. Further, as one of the oldest, longest-living flowering plants in the region, it holds particular value to the area ecosystem, as habitat, shade, and a source of visual beauty. The DEIS indicates that Creosote Scrub Brush is present on the site and states that project construction "would result in permanent and long-term adverse impacts to . . . 1,026 acres of Creosote Bush Scrub." DEIS at 4.3-5. This is a significant cultural impact that is not addressed in the DEIS.

In its discussion of Biological Resources, the DEIS analyzes the impacts to vegetation, including Creosote Scrub Brush, and proposes measures to compensate for impacts to vegetation resources and wildlife habitat resources. DEIS at 4.3-20. However, the DEIS does not determine that those measures will compensate for cultural impacts resulting from the loss of the Creosote Scrub Brush. The DEIS states that "[t]he project Owner will acquire and protect, in perpetuity, compensation habitat . . . [that] will be placed under conservation management . . ." *Id.* It is unclear whether Tribal members will be able to continue to use the plants in their traditional fashion and/or whether the compensation lands will be located within CRIT's traditional homeland. The DEIS must be revised to analyze the impacts of the loss of this plant species on the Tribes and to minimize or mitigate for these cultural impacts where feasible.

C003-8

VI. The DEIS's Discussion of Environmental Justice Impacts Fails to Capture the Disproportionate Impacts to Native Americans, Such as CRIT Members.

The DEIS defines the project study area for its environmental justice analysis as the area within one-half mile of the proposed Project site. DEIS at 4.16-1. The DEIS then discloses that the percentage of minority and low-income population within 0.5 miles of the Project site is less than 50%. Based on that equation alone, the DEIS concludes that no environmental justice impacts will occur. *Id.* at 4.16-3.

The DEIS's approach is much too narrow and fails to capture the disproportionate impacts felt by Native Americans, such as CRIT members, affiliated with the impacted cultural resources. Executive Order 12898 requires agencies to consider whether their activities result in "environmental effects [that] are

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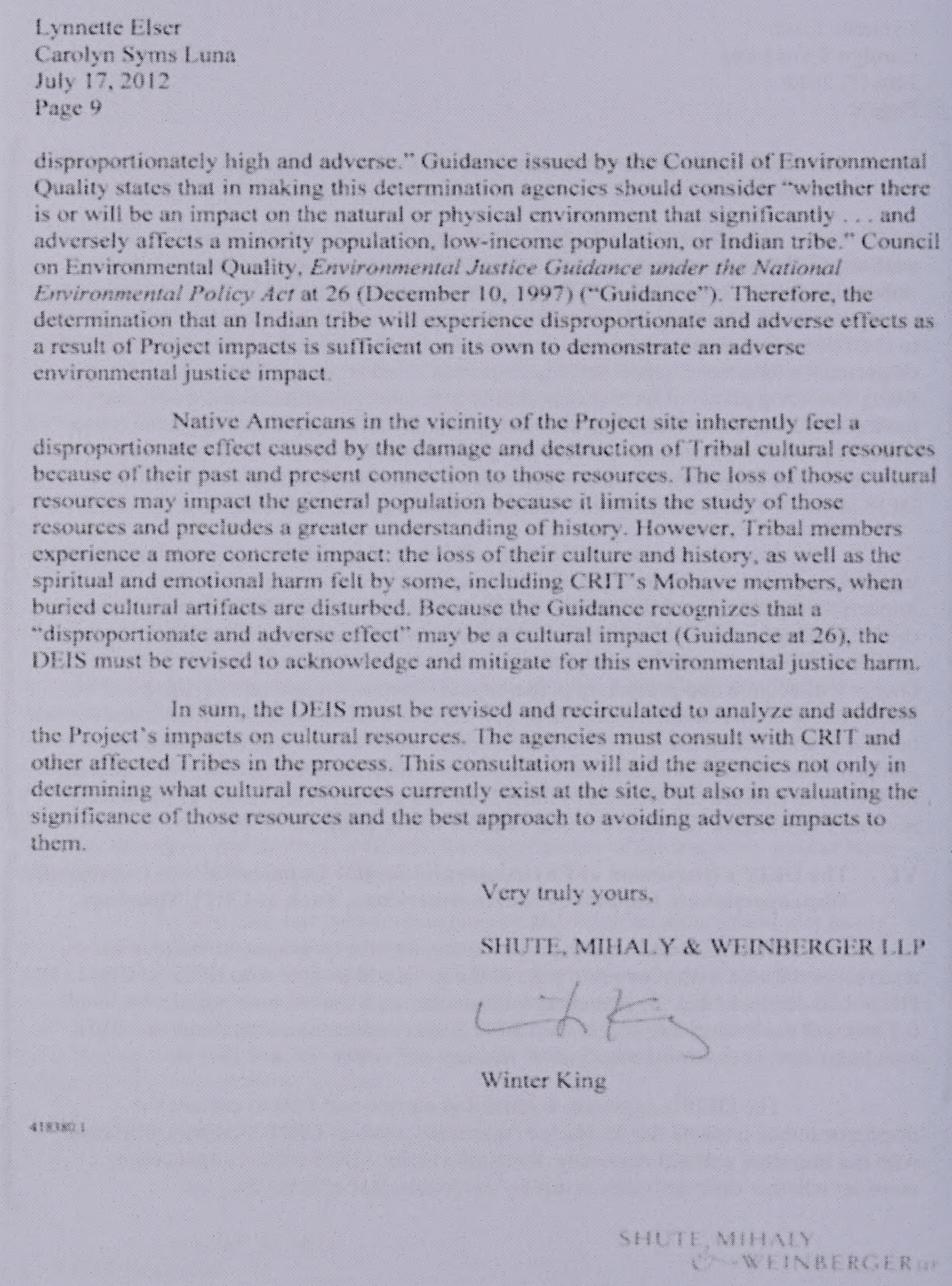

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disproportionately high and adverse." Guidance issued by the Council of Environmental Quality states that in making this determination agencies should consider "whether there is or will be an impact on the natural or physical environment that significantly . . . and adversely affects a minority population, low-income population, or Indian tribe." Council on Environmental Quality, *Environmental Justice Guidance under the National Environmental Policy Act* at 26 (December 10, 1997) ("Guidance"). Therefore, the determination that an Indian tribe will experience disproportionate and adverse effects as a result of Project impacts is sufficient on its own to demonstrate an adverse environmental justice impact.

Native Americans in the vicinity of the Project site inherently feel a disproportionate effect caused by the damage and destruction of Tribal cultural resources because of their past and present connection to those resources. The loss of those cultural resources may impact the general population because it limits the study of those resources and precludes a greater understanding of history. However, Tribal members experience a more concrete impact: the loss of their culture and history, as well as the spiritual and emotional harm felt by some, including CRIT's Mohave members, when buried cultural artifacts are disturbed. Because the Guidance recognizes that a "disproportionate and adverse effect" may be a cultural impact (Guidance at 26), the DEIS must be revised to acknowledge and mitigate for this environmental justice harm.

In sum, the DEIS must be revised and recirculated to analyze and address the Project's impacts on cultural resources. The agencies must consult with CRIT and other affected Tribes in the process. This consultation will aid the agencies not only in determining what cultural resources currently exist at the site, but also in evaluating the significance of those resources and the best approach to avoiding adverse impacts to them.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

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& WEINBERGER LLP

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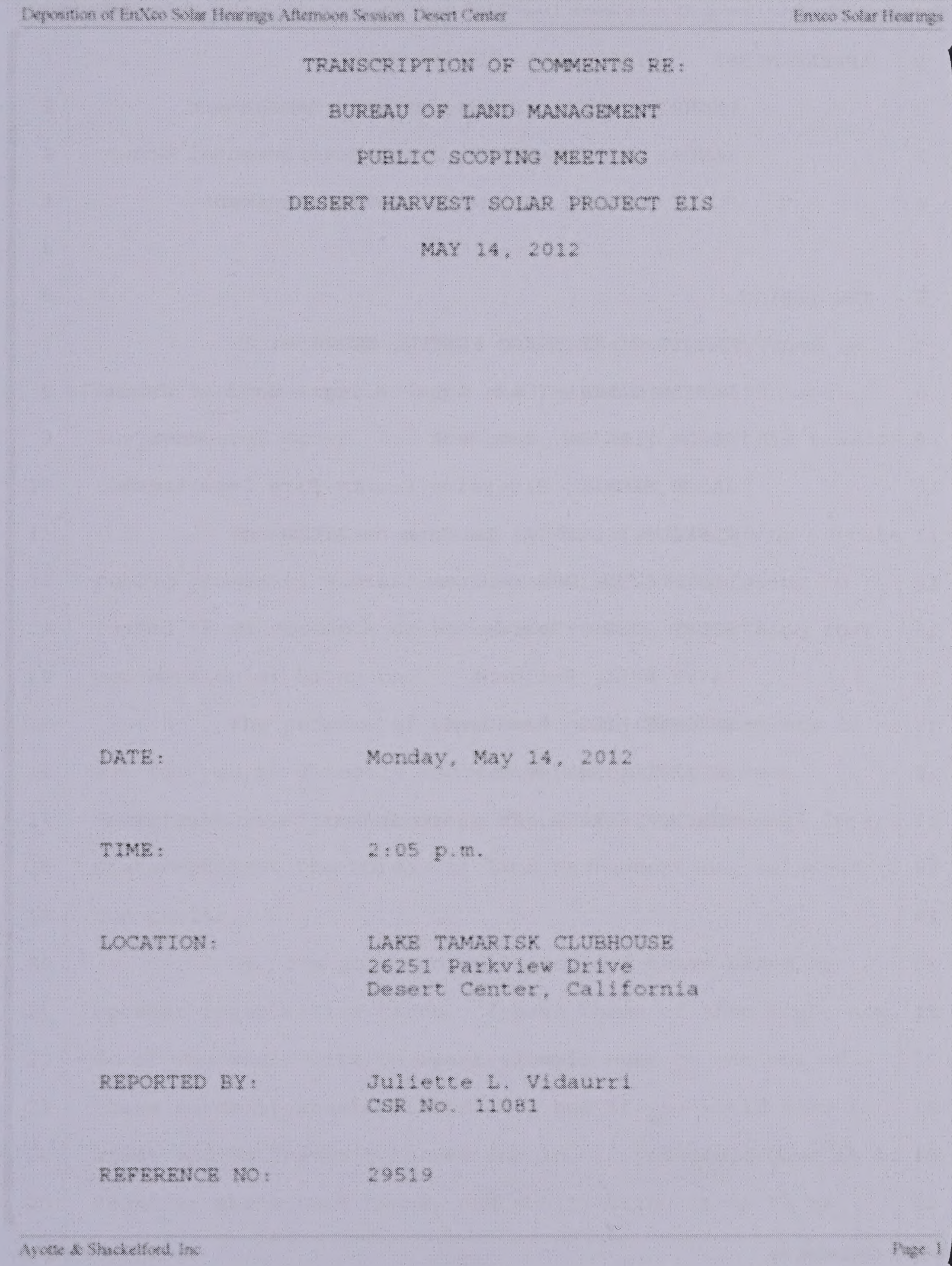
PUBLIC MEETING OF MAY 14, 2012 - AFTERNOON



Deposition of EnXco Solar Hearings Afternoon Session Desert Center

Enxco Solar Hearings

TRANSCRIPTION OF COMMENTS RE:

BUREAU OF LAND MANAGEMENT

PUBLIC SCOPING MEETING

DESERT HARVEST SOLAR PROJECT EIS

MAY 14, 2012

DATE: Monday, May 14, 2012

TIME: 2:05 p.m.

LOCATION: LAKE TAMARISK CLUBHOUSE
26251 Parkview Drive
Desert Center, California

REPORTED BY: Juliette L. Vidaurri
CSR No. 11081

REFERENCE NO: 29519

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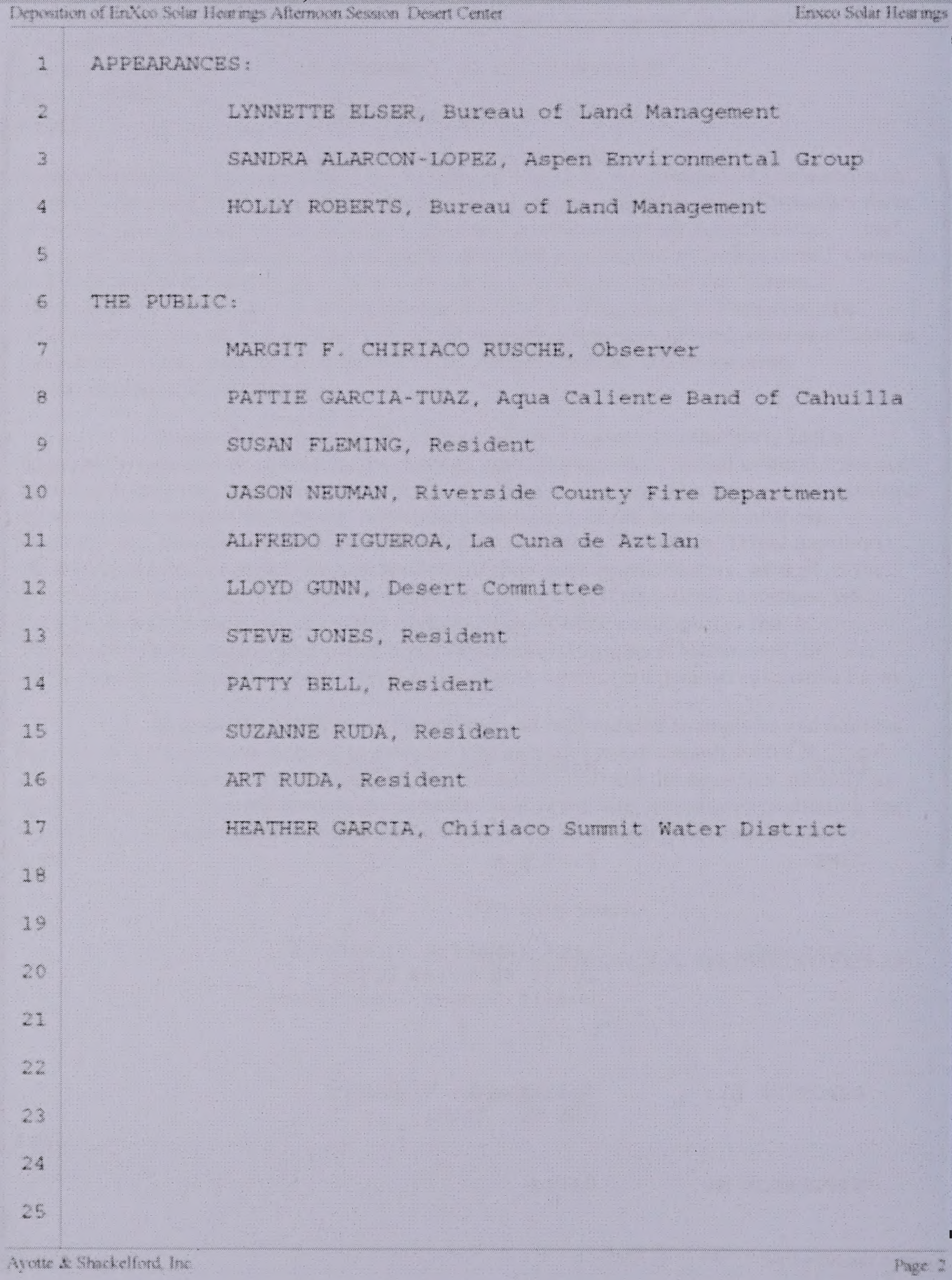

APPEARANCES:

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HOLLY ROBERTS, Bureau of Land Management

THE PUBLIC:

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COMMENT SET D001, CONT.
PUBLIC MEETING OF MAY 14, 2012 - AFTERNOON

D001-1 Cont.

DESERT CENTER, CALIFORNIA

MONDAY, MAY 14, 2012

2:05 P.M.

(Presentations given.)

* * *

MS. ALARCON-LOPEZ: Good afternoon. My name is Sandra Alarcon-Lopez. I'm a senior associate with Aspen Environmental Group, and I'm going to help with this session today.

And what we're going to do is we are going to take public comments; and as has been stated, we are going to record those comments so we have a record of anything that you mention or bring up.

The purpose of the meeting or these comments is -- are for you to directly address anything that's been described or written about in the Draft Environmental Impact Statement that the Bureau of Land Management has released to the public.

Um, I'm going to call people's names based on speaker registration cards. I have three of them right now. So if you would like to speak, I will need to get one of these cards or sheets filled out; and if you would like to speak and you haven't turned one in, if you could give it to Jennifer who's back there, and she'll bring it up to me.

COMMENT SET D001, CONT.
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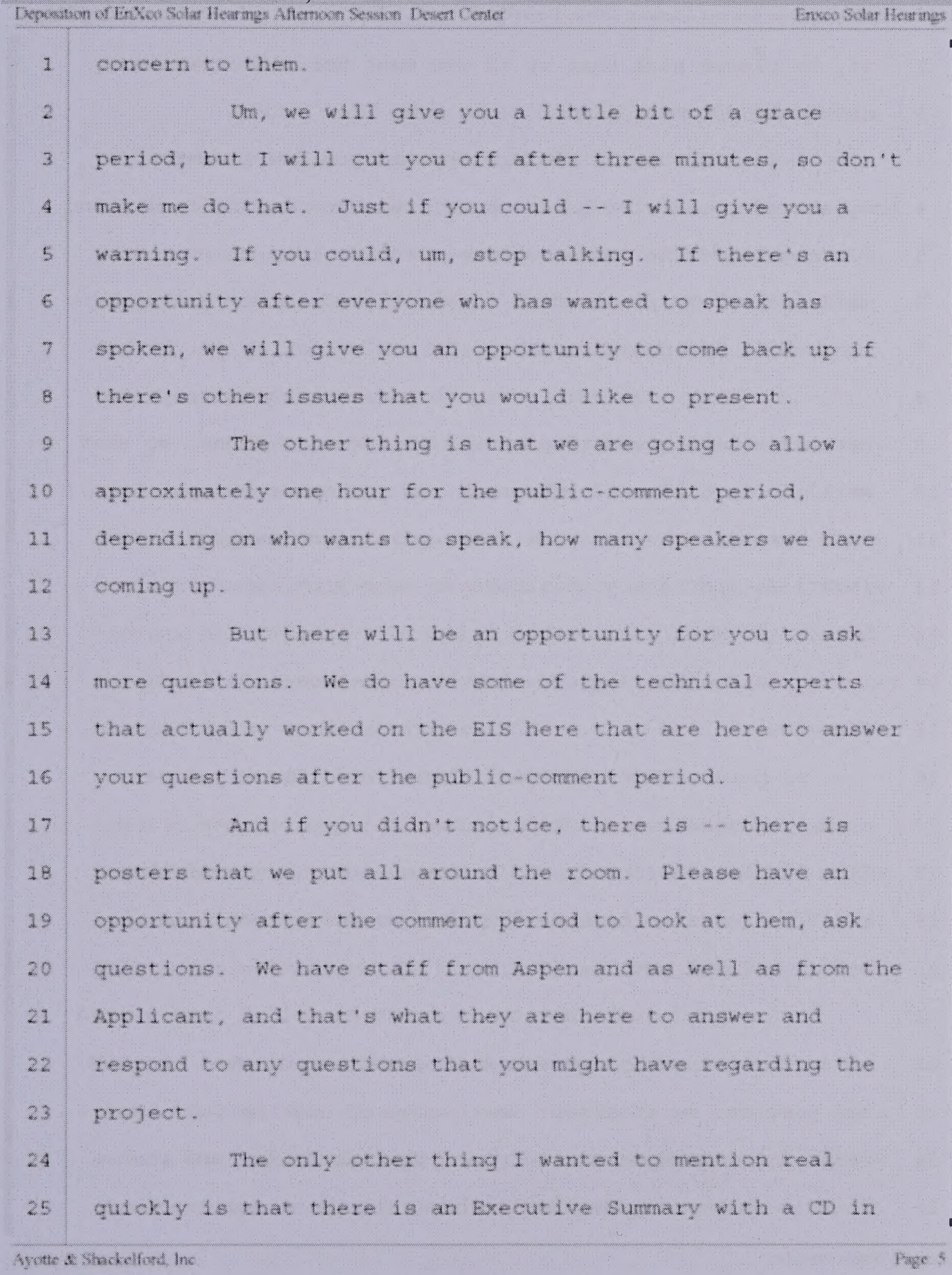
D001-1

We do want to give everyone an opportunity to make a comment on this project or on any issues that you think are important; either the way a project is described, information that we put in about how we analyze the project, any mitigation measures that we identify. If you think there are other issues that we ought to consider or improve, please mention those as well. If there are issues that you have with any of the alternatives that you think we ought to consider and address in the document, please bring those up too.

We are going to limit any responses at this time because we really do want to hear your comments, and we want to get those comments recorded. Um, so when I call a person's name, if you can please repeat your name, tell us where you're from, and that would be recorded by the reporter for our further records, and it becomes a written document that we use in preparing the -- or revising the EIS, so please make sure that we get that information clearly.

We also want to make sure that we give everybody the opportunity to speak, and so we are going to limit your time. We are going to limit your time to three minutes, and we're doing that because we really do want to hear everybody's comments, and we want to give everybody the opportunity to come up and present any issues that are of



concern to them.

Um, we will give you a little bit of a grace period, but I will cut you off after three minutes, so don't make me do that. Just if you could -- I will give you a warning. If you could, um, stop talking. If there's an opportunity after everyone who has wanted to speak has spoken, we will give you an opportunity to come back up if there's other issues that you would like to present.

The other thing is that we are going to allow approximately one hour for the public-comment period, depending on who wants to speak, how many speakers we have coming up.

But there will be an opportunity for you to ask more questions. We do have some of the technical experts that actually worked on the EIS here that are here to answer your questions after the public-comment period.

And if you didn't notice, there is -- there is posters that we put all around the room. Please have an opportunity after the comment period to look at them, ask questions. We have staff from Aspen and as well as from the Applicant, and that's what they are here to answer and respond to any questions that you might have regarding the project.

The only other thing I wanted to mention real quickly is that there is an Executive Summary with a CD in

D001-1 Cont.

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it, so please pick that up if you want more information about the document.

And then if you are shy and you don't want to speak today, we also have a sheet that you can fill out, and you can leave the comments here with us today or you can mail it in. So please feel free, if you want to talk or you can submit written comments.

Okay. We were going to pass out the microphone, but we're having some feedback with the microphone, so what we'll do is I'll call your name, if you can come up. Like I said, state -- repeat your name again, give us your location, and then you'll have to make your comments up here.

So the first speaker that we have is Alfredo Figueroa.

MR. FIGUEROA: Thank you. Thank you very much. My name's Alfredo Figueroa, F-i-g-u-e-r-o-a. I'm from Blythe, California. I'm the monitor -- one of the monitors for the Chemehuevi tribe, so we've been here before. Thank you.

And I just want to -- first of all, I just wanted to say, you know, this is a whole, uh, map of what the BLM has proposed or they sent us the map of how the I-10 is a -- well, it's the most sacred place that there is, and then this is where they decided to have all those solar power

COMMENT SET D001, CONT.
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D001-1 Cont.

projects.

And we have gone to all these places, and we can tell you why we're truly against all these sites that are not here -- that are here, and this just makes a mockery out of any citizen of the United States that's here, especially if you're indigenous like us. We're from the Uto-Aztecan. That's why we can relate all these sites to the Aztec calendar, tonalmachotl.

D001-2

That's why this mountain is called Eagle Mountain because it's where the sun descends. When? June the 21st is the longest day of the year, but every day the sun is a cycle and the codices -- the codices relate to that. These codices here right, Florentine codices. Miss Holly wanted to ... so we're going to have to sharpen her up and have her go to Chicano studies program UCR.

So the other thing that this whole thing is -- this is -- the whole Aztec calendar is based here, right here from a hundred miles down to a hundred miles the other side of Blythe. So even the Mule Mountain is called Calli. That's where the name California comes from. Molcajate at the time.

We have a MOU with BLM. Me and my friend were there, George Klein, and we went to the sites, so they know we are not making up stories, and we can go here and run to the sites that's right here. It's called the 13 --

COMMENT SET D001, CONT.
PUBLIC MEETING OF MAY 14, 2012 - AFTERNOON

D001-2

13-Acatl. This is the top of the Aztec Sunstone Calendar. It's just right here, three miles -- 4.7 miles.

An old friend of mine Francis Johnson made this report, and Francis I didn't know before, but when I read his book and I contacted him, he said, okay. So he gave me these old pictures, and I've got a new picture of us right here. Believe it or not, that's me, and this is Patricia and Francis Johnson made this. This is the 13-Acatl.

Likewise, with that mountain right over here, it's called West Bunny. Now they call it Alligator Ridge -- Ridge, rather, and we call it also Chuckawalla. This is the fourth day of the Aztec Sunstone Calendar.

You are standing -- you are living here. People here in Desert Center are blessed because right there Corn Springs is call Tula.

D001-3

We're about ready?

MS. ALARCON-LOPEZ: Yeah.

MR. FIGUEROA: Oh. Good golly, Miss Molly.

MS. ALARCON-LOPEZ: You can come back after.

MR. FIGUEROA: One more?

MS. ALARCON-LOPEZ: Five seconds.

MR. FIGUEROA: Five seconds.

Okay. They make this ground breaking in Blythe. They're ground breaking and all they do is take a tour of

COMMENT SET D001, CONT.
PUBLIC MEETING OF MAY 14, 2012 - AFTERNOON

D001-3 Cont.

part of the sun's -- the sun calendar, the geoglyph and the two north geoglyph, and they went and broke ground June the 17th.

Thank you, everybody.

MS. ALARCON-LOPEZ: Thank you.

D001-4

Lloyd -- Lloyd Gunn.

MR. GUNN: My name is Lloyd Gunn. In the last 25 years I've known many BLM employees, and I've talked to several of them about this fast-track process on occasion, solar and wind projects.

Several of the BLM employees are telling me they must give an official environmental report even though -- even though they are not given adequate time to complete a professional study. There's tremendous pressures put upon BLM employees to go through these projects.

To me this fast-track process is not a legitimate process, and I hope there is truth in the future so people will believe -- believe in what they say when they approve these projects.

That's it.

D001-5

MS. ALARCON-LOPEZ: Thank you. Matthew Johnson. And just one quick comment. This is the last speaker that I have, so if anybody wants to speak.

MR. JOHNSON: Good afternoon. My name is Matthew Johnson. Um, I'm a landowner here in the Desert

COMMENT SET D001, CONT.
PUBLIC MEETING OF MAY 14, 2012 - AFTERNOON

D001-5

Center area. We have eleven hundred acres. I've been here since 2004, not for very long by most means, but been out here a lot.

I've developed stuff here in the desert, so I know the process that you have to go through a lot, and I've been watching the Enxco people and their process, and they've done a lot of community outreach, which I certainly appreciate as now being one of the semi-locals.

D001-6

Um, I'm hopeful that this project is approved in a timely fashion such that they're allowed to move forward because jobs are important, especially to this area and especially to people of this area.

D001-7

One other little side note on the -- we used to have an access. This area used to have access to the national park. There's a road that was paved at one point; and when it became a wilderness area, it got closed, and I was hopeful through this environmental process that people would be able to have that access returned once again so we could make the Desert Center area an access point for the Joshua Tree National Monument.

Thank you.

MS. ALARCON-LOPEZ: Thank you. Any other comments?

(No response.)

MS. ROBERTS: Chickens. This is -- this

COMMENT SET D001, CONT.
PUBLIC MEETING OF MAY 14, 2012 - AFTERNOON

D001-7 Cont.

is -- this is Desert Center. I'm -- I'm absolutely amazed. Nobody else would like to get up and fill out a card? Your comments are very important to us.

MR. JOHNSON: You've done such a good job.

MS. ALARCON-LOPEZ: If you think of something after -- after you've had an opportunity to talk to people, you can fill out one of these forms.

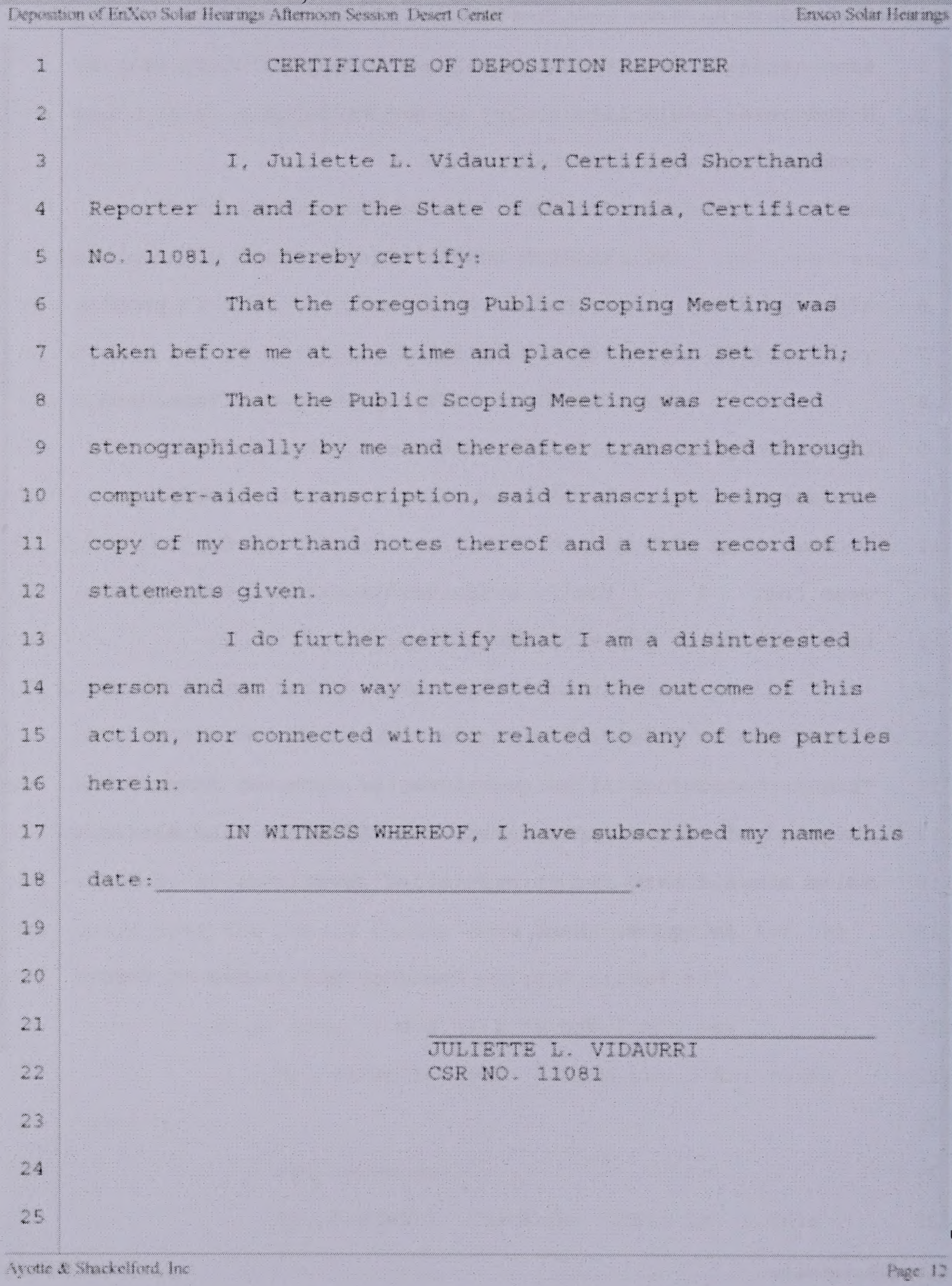
MS. ROBERTS: Well, whoever sees Donna and Larry Charpied next, I -- I always call them defenders of the desert. You let them know that I really missed them because they always make things so much lively for us, and I mean that. I -- I really enjoy working with Donna. She's never afraid to say what she thinks.

So but if no one else wants to get up, we've got a lot of really interesting people who worked on this project. They can answer detailed questions, um, you may have, and everybody from the Enxco folks, the BLM folks, and the Aspen folks are all here for more detailed questions.

So, guys, thank you.

(The Public Scoping Meeting held in Desert Center was concluded at 2:18 p.m.)

COMMENT SET D001, CONT.
PUBLIC MEETING OF MAY 14, 2012 - AFTERNOON



Deposition of EnXco Solar Hearings Afternoon Session Desert Center

Enxco Solar Hearings

CERTIFICATE OF DEPOSITION REPORTER

I, Juliette L. Vidaurri, Certified Shorthand Reporter in and for the State of California, Certificate No. 11081, do hereby certify:

That the foregoing Public Scoping Meeting was taken before me at the time and place therein set forth;

That the Public Scoping Meeting was recorded stenographically by me and thereafter transcribed through computer-aided transcription, said transcript being a true copy of my shorthand notes thereof and a true record of the statements given.

I do further certify that I am a disinterested person and am in no way interested in the outcome of this action, nor connected with or related to any of the parties herein.

IN WITNESS WHEREOF, I have subscribed my name this date: ______________________.

JULIETTE L. VIDAURRI
CSR NO. 11081

Ayotte & Shackelford, Inc

Page 12

D001-7

COMMENT SET D002
PUBLIC MEETING OF MAY 14, 2012 - EVENING

D002-1

REPORTER'S TRANSCRIPTION OF COMMENTS RE:
BUREAU OF LAND MANAGEMENT
DESERT HARVEST SOLAR PROJECT
DRAFT EIS PUBLIC INFORMATION WORKSHOP

DATE: MONDAY, MAY 14, 2012

TIME: 7:00 P.M. - 8:15 P.M.

LOCATION: JOSHUA TREE COMMUNITY CENTER
6171 Sunburst Avenue
Joshua Tree, California

REPORTED BY: JENNIFER BARNAKIAN-POLAND
CSR NO. 13317

REFERENCE NO: 29520

COMMENT SET D002, CONT.
PUBLIC MEETING OF MAY 14, 2012 - EVENING

D002-1

APPEARANCES:

SPEAKERS:

SANDRA ALARCON-LOPEZ, Aspen Enviromental Group

LYNETTE ELSER, Bureau of Land Management

THE PUBLIC:

SETH SHTEIR, National Parks Conservation Association

COMMENT SET D002, CONT.
PUBLIC MEETING OF MAY 14, 2012 - EVENING

D002-1 Cont.

JOSHUA TREE, CALIFORNIA
MONDAY, MAY 14, 2012
7:00 P.M.

(OPEN HOUSE)

(PRESENTATION)

-OOO-

MS. LOPEZ: Welcome. What we want to do is start the public comment period. It is a little, I think, stuffy in here. I just wanted to let you know if you want a drink of water, we do have a few little items up here, especially water, if it gets too warm for you.

What we want to do is start the public comment period, and we did have -- we have a set rule that we're going to follow. So far I only have one speaker slip. If you want to speak, you could fill out one of these forms and they're right up here, and I'll be right here, so that we know if there's anybody else that wants to provide a comment.

What we want to do is change it up a little bit because we now only have one person who filled out a form. What we're going to do is give Seth an opportunity to speak for five minutes, and then we are

COMMENT SET D002, CONT.
PUBLIC MEETING OF MAY 14, 2012 - EVENING

D002-1

going to cut you off at five minutes, and see if we can get anyone else who wants to make a comment, and if not, if there's anything else you want to add, we'll give you that opportunity to do that.

We do want to get your comments. We're very interested in hearing what opinions you have.

If you could keep your comments focused on EIS because that's the purpose of this meeting is for us to get your comments on that, but we do want to give you an opportunity to comment and to give us your input. We also have, over here on the table, this form so that if you decided you wanted to give us comments on a later date or you're shy and you don't want to speak, you could leave your comments here or mail them in as we noted earlier.

So with that I'm going to go ahead and let Seth go for about five minutes. Then we'll see if anybody else wants to speak.

Please give your name -- your full name and so that the court reporter can --

MR. SHTEIR: Okay. I'll try to speak slowly, if I can.

Well, good evening. My name is Seth Shteir. I work for National Parks Conservation Association. I'm the desert field rep. And the mission of our

COMMENT SET D002, CONT.
PUBLIC MEETING OF MAY 14, 2012 - EVENING

D002-1 Cont.

organization is simple, it's to protect the national parks for present and future generations. So I'm going to give you comments about Desert Harvest tonight, and I thank you for the opportunity to do so. I'll try to keep the time on that.

Well, this is a large project, 1,208 acres, 150-megawatt, 220-kilovolt of generation, a gen-tie line [Phoenetic] that consists of photovoltaic rays, structures, and fencing, and lighting to protect the facility. The preferred alternative would locate the project within two miles of Joshua Tree National Park's boundaries. This interception, which I believe, makes this project need to stand up to a higher level of scrutiny than would normally be afforded by a project in a different location.

We can't support this project at its current location because of this and would encourage project proponents to seek undisturbed land elsewhere in the California desert. We do support Alternative 1 which is no action or Alternative 3 which is no action, no project alternative with a planned site unsuitable for large scale solar development.

D002-2

To really understand the context of our opposition, I think you have to understand a little bit about Joshua Tree National Park. Joshua Tree National

COMMENT SET D002, CONT.
PUBLIC MEETING OF MAY 14, 2012 - EVENING

D002-2

Park is designated a national monument in 1936 by Franklin Delano Roosevelt. This created the national park in 1994 with the passage of the California Desert Protection Act, and it is 794,000 acres, half of which are wilderness. This is a place where people come from all over the world to star gaze, to look at rocks, to picnic, to backpack, to rock climb, and it's a very special place, and in fact, in 2010, there were 1.4 -- that's 1.4 million visits to Joshua Tree National Park. In fact, during the worst economic times since the Great Depression, from 2008 to 2010, visitation to Joshua Tree National Park actually rose.

So what you have really is a park that's a tourist destination, regionally, nationally, and internationally, and it's a significant source of economic revenue for the community that depend on it. So there's a professor, late professor, Daniel Stein of Michigan State University.

Has anyone heard of him?

So he has done this MPS generation model, and visitors in 2010 contributed about $64 million to gateway communities and communities within a 30-mile radius of Joshua Tree National Park. So the park really is a powerful economic engine. There's a subsequent study, that maybe some of you are familiar with, that's

COMMENT SET D002, CONT.
PUBLIC MEETING OF MAY 14, 2012 - EVENING

the 2010 University [inaudible] Visitor Use Study. This study looks at why people come to Joshua Tree National Park. So the two top values associated with Joshua Tree National Park, "views without development," were 90 percent of people who stated that, and coming in third, I think, was, "wildlife." Interestingly enough, these are the very things that are impacted by projects like Desert Harvest and the type of development going on in the California Deserts, and so as a concern point there's a tipping point where people don't think of Joshua Tree National Park as a place to come to find unobstructed views, if they don't think of it as a place where they could find wildlife, we may lose a certain share of tourism revenue. So that's something to take into consideration when permitting these projects. D002-2 Cont.

A few additional comments, you know, the project will have unavoidable adverse effects to air quality, vegetation, wildlife, night skies, wilderness, and of course recreation. D002-3

And I have one question for folks here tonight. There was some confusion about the cumulative impact section that I had, and perhaps, somebody could answer it for me today. D002-4

Was the Riverside East Solar Energy Zone evaluated in the cumulative impacts and was Paradise

COMMENT SET D002, CONT.
PUBLIC MEETING OF MAY 14, 2012 - EVENING

D002-4

Valley development evaluated in the cumulative impacts?

And not just -- not just the ones that were already displayed for development in Riverside East, but just the whole package.

Okay. Well, I'll finish up. I'll finish my five minutes.

In any event, there was some uncertainty as to whether those were included in the cumulative impacts. I would say it's essential that they are included in the cumulative impacts, Riverside East Solar Energy Zone, 153,000 acres, over 80 percent would be developed as renewable energy in Paradise Valley, which is 35 miles away. It would expand the north and south of the 10 Freeway, about a 6,000-acre development and possibly a large town.

So these are things that would affect Joshua Tree National Park's resources, and they should definitely be included in the cumulative impacts if they haven't been already. I'll --

MS. LOPEZ: Yes.

Does anybody else want to make a comment?

I'll give you another 30 seconds or so.

MR. SHTEIR: I think, if folks don't mind, I'd like to include my comments. I think the length of time for the project and from project construction to

COMMENT SET D002, CONT.
PUBLIC MEETING OF MAY 14, 2012 - EVENING

D002-4 Cont.

decommissioning should allow me about 10 minutes. I think that's reasonable.

So let me just go on a second about air quality. Again, cumulative impacts of geographic scope for air quality. The cumulative impacts is a six-mile radius, according to the Draft DIR. And that strikes me as a slightly small radius, and the reason for that is when you think of Joshua Tree National Park's view sheds, you think about looking for Keys View, you're looking into the south and on a clear day, you could look across and see Signal Mountain over 50 miles away or you could see Mt. San Jacinto 50 miles away. So when you're thinking about cumulative impacts view shed, you must consider not only Desert Harvest and the immediate impacts there, but all of the proposed projects that might impact these view sheds at JOTR. And while we're

D002-5

concerned about that is -- very directly -- in October of 2011, the park did a foundation statement which basically analyzed resources, and they found that ozone levels within the park -- and Luke [Phoenetic] schooled me on this -- are non-obtainment status and are not improving, and dust, both natural, resulting from land use change, are impacting the park's air, and the park is in non-obtainment status for fine particulate matter PM-10 and PM-2.5.

Comment Set D002, cont.
Public Meeting of May 14, 2012 - Evening

D002-5 C

So these are things that are going to be created by Desert Harvest, and they are going to be created by many other projects down to the south of the park. And in order to make really good decisions, we need to have good information, and in order to have good information, we need to have good data and good analysis.

D002-6

Two other quick notes I'd like to enter into the record are, it's come to my attention that the first solar mitigation, the project to the north of this, has not been entirely effective. In other words, the ground has been scraped, and the workers are working on certain solar rays and mitigating that specific area, but the rest of the scraped area is currently creating small dust situations, so in that case, it's been a situation where the mitigation hasn't quite taken care of what it said it would and that needs to be improved.

D002-7

The second question that is a concern for those of us who are looking at the water resources of the Chuckawalla Valley, will the water -- will it come from outside of the basin or a well for solar? Can anybody answer that in the audience?

MS. ELSER: Right now we're looking at both alternatives, and there isn't a final decision.

MR. SHTEIR: There are concerns about overdraft

COMMENT SET D002, CONT.
PUBLIC MEETING OF MAY 14, 2012 - EVENING

of that aquaphor that are great.

D002-7 Cont.

So let me just go on a couple of other things, and I don't want to take too much of your time tonight. I guess, there's not too many people waiting, so there's some discussion in the Draft DIR that Alternative B could affect off-site vegetation, particularly desert dry wash woodland, down stream of work sites by altering water quality or surface hydrology, and so I'd like to see the figures of what could be effected including in the Draft DIR.

D002-8

And another interesting thing to point out is that the Draft DIR points out that projects within the city would impact over 35,000 acres of desert dry wash woodland, in extremely rare habitat.

The solution to that is compensatory mitigation, and I think we all know that is kind of an interesting slippery slope because the question arises is there adequate compensatory mitigation for things like desert tortoises and things for desert dry wash woodland? I think that should be entered into the record, and I think real consideration ought to be given to that.

D002-9

The last comment I had is really about the desert tortoises and your table 4.4-4 shows cumulative impacts of the Colorado Desert Recovery Unit and desert tortoise habitat.

D002-10

COMMENT SET D002, CONT.
PUBLIC MEETING OF MAY 14, 2012 - EVENING

D002-10

And so there's three columns. The first column is really the total amount of habitat, the second column is the existing project impact, and the third column is foreseeable project impact. The sum total, when you add that up, the foreseeable project's impact and existing project impact is also almost 400,000 acres of desert tortoise habitat. That's really a lot. So, again, when you talk about compensatory mitigation where will it come from? And when you talk about land-use plumbing, it just begs the question, how are we making good decisions with our wood land use plan?

D002-11

So in conclusion, I would like to thank you all. I've taking enough of your time and thanks very much.

MS. LOPEZ: Okay. Anyone else that would like to speak before we close down here?

You know what might also be helpful if you could turn in the written comments, too.

MR. SHTEIR: Sure.

MS. LOPEZ: I noticed you had all those comments written down. I also wanted to let you know we have technical experts from Aspen as well as representatives from EnXco, so if there are any questions you would like to ask, they are here and will be around for a little while to answer any additional

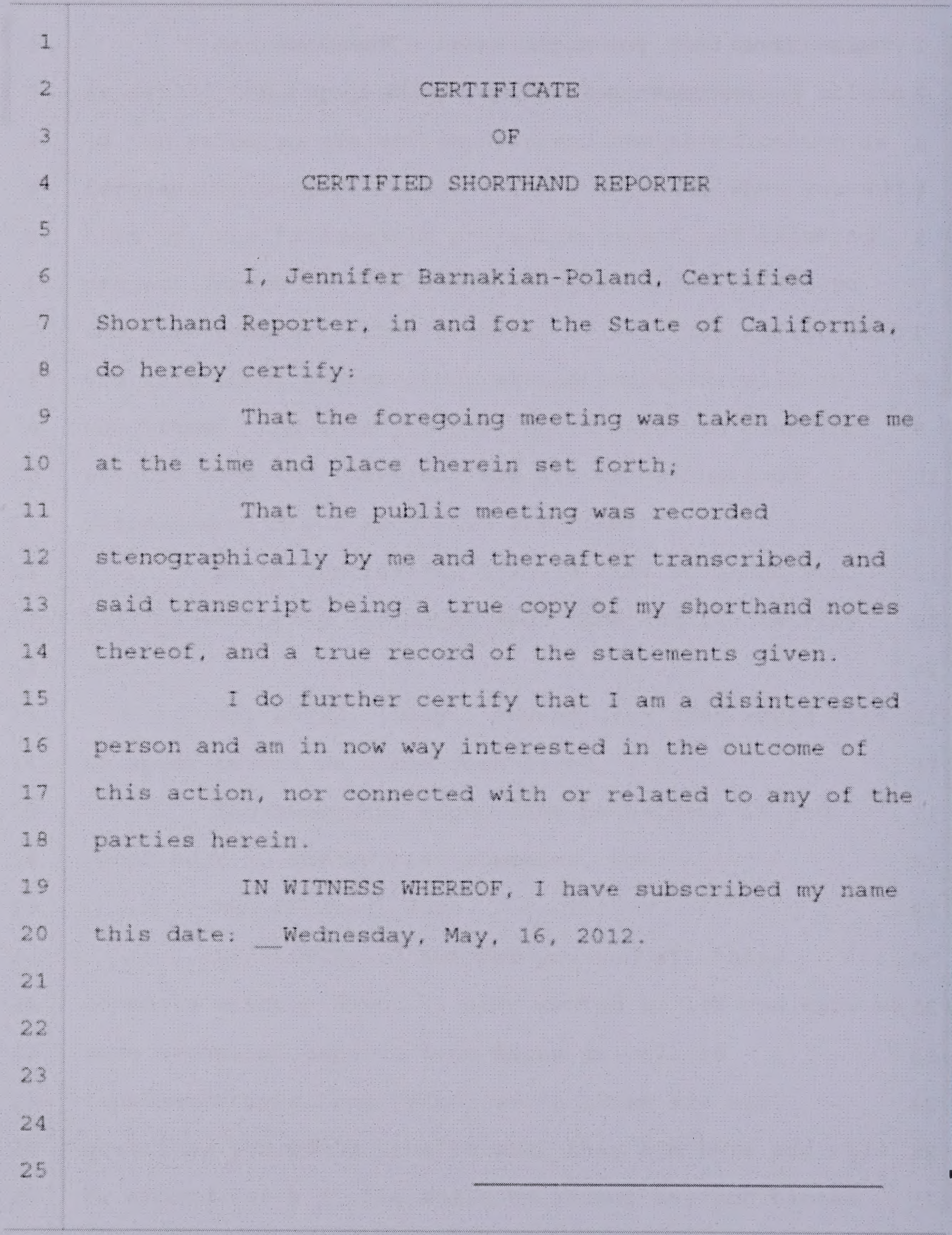
COMMENT SET D002, CONT.
PUBLIC MEETING OF MAY 14, 2012 - EVENING

questions that you might have. Thank you.

(Comments Concluded at 8:15 p.m.)

D002-11 Cont.

COMMENT SET D002, CONT.
PUBLIC MEETING OF MAY 14, 2012 - EVENING



D002-1

CERTIFICATE
OF
CERTIFIED SHORTHAND REPORTER

I, Jennifer Barnakian-Poland, Certified Shorthand Reporter, in and for the State of California, do hereby certify:

That the foregoing meeting was taken before me at the time and place therein set forth;

That the public meeting was recorded stenographically by me and thereafter transcribed, and said transcript being a true copy of my shorthand notes thereof, and a true record of the statements given.

I do further certify that I am a disinterested person and am in now way interested in the outcome of this action, nor connected with or related to any of the parties herein.

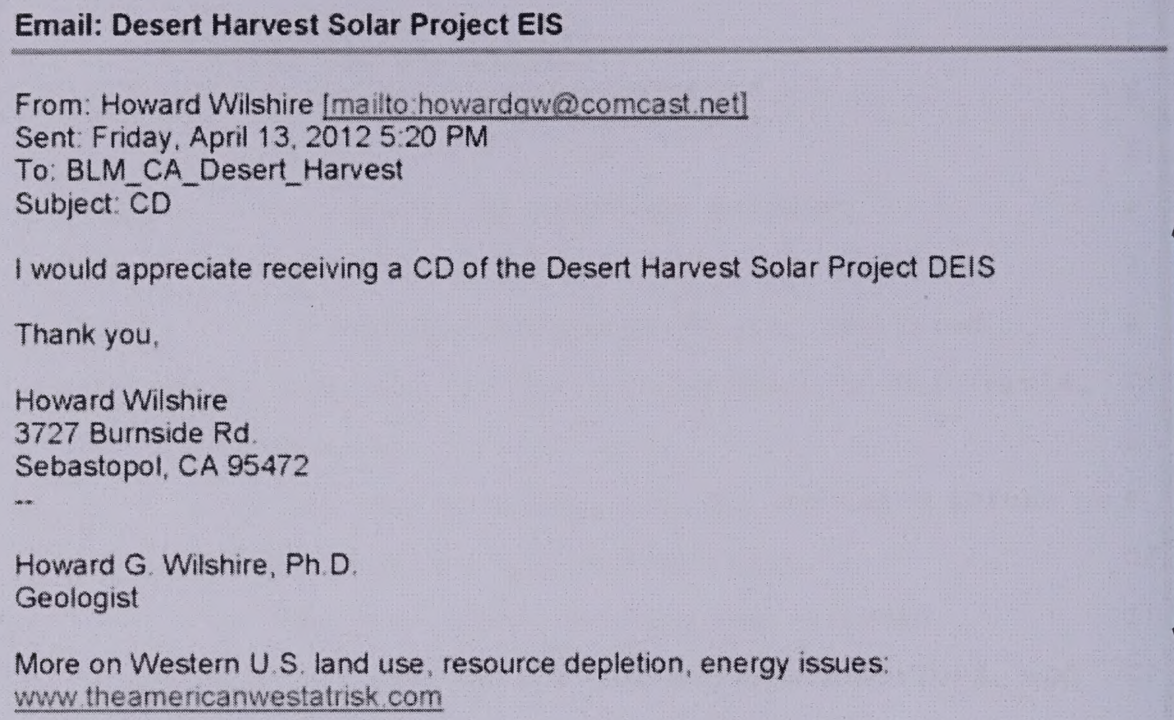
IN WITNESS WHEREOF, I have subscribed my name this date: __Wednesday, May, 16, 2012.

COMMENT SET D002, CONT.
PUBLIC MEETING OF MAY 14, 2012 - EVENING

Jennifer Barnakian-Poland, CSR
Certificate No. 13317

D002-11 Cont.

Comment Set E001
Howard Wilshire Ph.D.



Email: Desert Harvest Solar Project EIS

From: Howard Wilshire [mailto:howardgw@comcast.net]
Sent: Friday, April 13, 2012 5:20 PM
To: BLM_CA_Desert_Harvest
Subject: CD

I would appreciate receiving a CD of the Desert Harvest Solar Project DEIS

E001-1

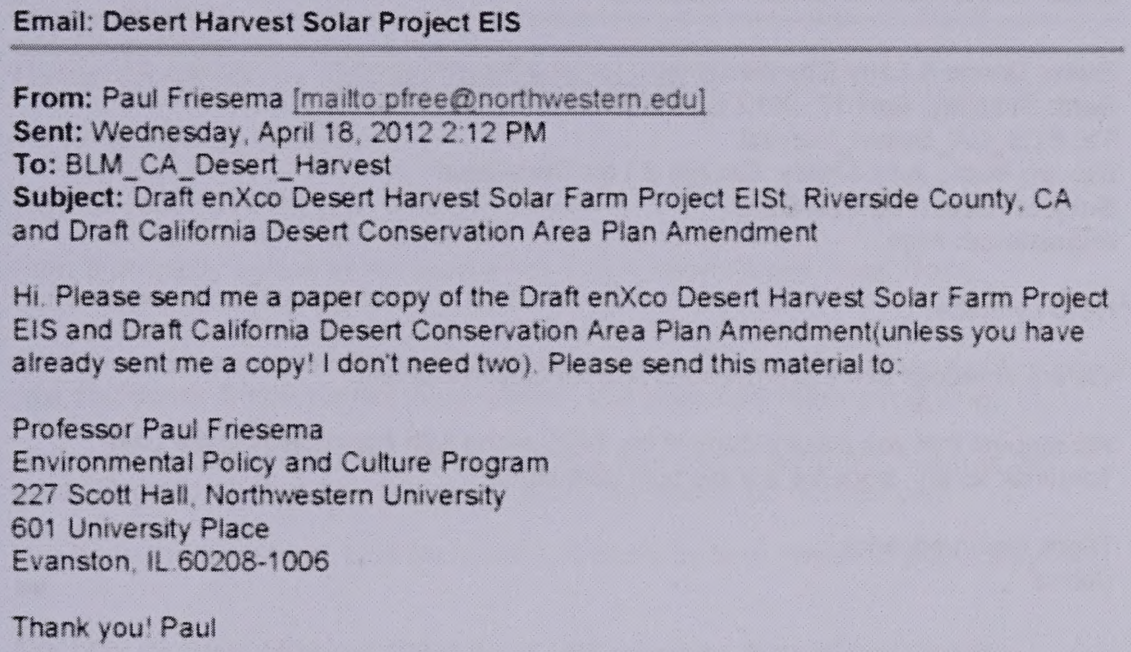
Thank you,

Howard Wilshire
3727 Burnside Rd.
Sebastopol, CA 95472
--

Howard G. Wilshire, Ph.D.
Geologist

More on Western U.S. land use, resource depletion, energy issues:
www.theamericanwestatrisk.com

COMMENT SET E002
PAUL FRIESEMA



Email: Desert Harvest Solar Project EIS

From: Paul Friesema [mailto:pfree@northwestern.edu]
Sent: Wednesday, April 18, 2012 2:12 PM
To: BLM_CA_Desert_Harvest
Subject: Draft enXco Desert Harvest Solar Farm Project EISt, Riverside County, CA and Draft California Desert Conservation Area Plan Amendment

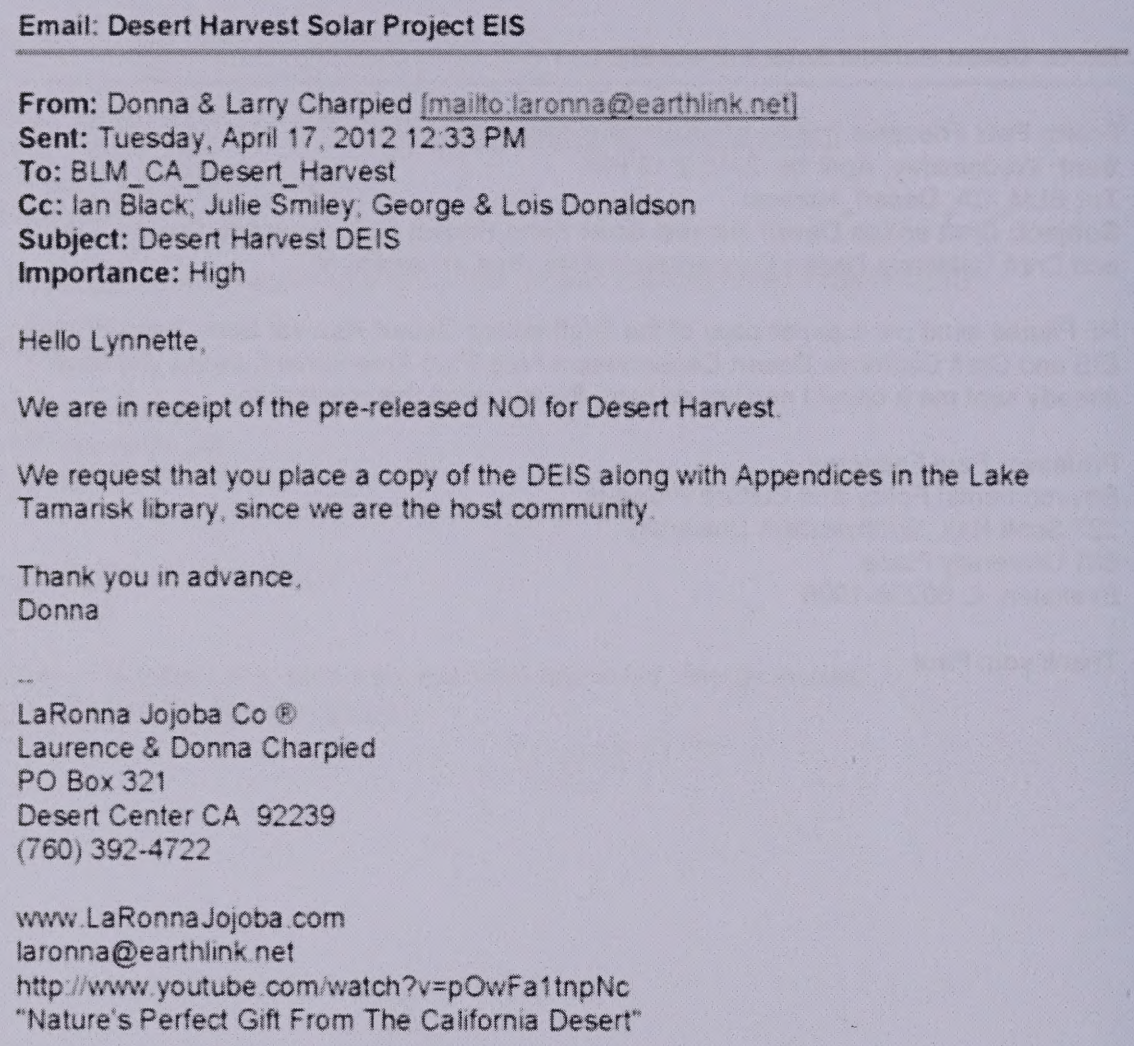
Hi. Please send me a paper copy of the Draft enXco Desert Harvest Solar Farm Project EIS and Draft California Desert Conservation Area Plan Amendment(unless you have already sent me a copy! I don't need two). Please send this material to:

Professor Paul Friesema
Environmental Policy and Culture Program
227 Scott Hall, Northwestern University
601 University Place
Evanston, IL 60208-1006

Thank you! Paul

E002-1

COMMENT SET E003
DONNA AND LARRY CHARPIED



Email: Desert Harvest Solar Project EIS

From: Donna & Larry Charpied [mailto:laronna@earthlink.net]
Sent: Tuesday, April 17, 2012 12:33 PM
To: BLM_CA_Desert_Harvest
Cc: Ian Black; Julie Smiley; George & Lois Donaldson
Subject: Desert Harvest DEIS
Importance: High

Hello Lynnette,

We are in receipt of the pre-released NOI for Desert Harvest.

We request that you place a copy of the DEIS along with Appendices in the Lake Tamarisk library, since we are the host community.

Thank you in advance,
Donna

--
LaRonna Jojoba Co ®
Laurence & Donna Charpied
PO Box 321
Desert Center CA 92239
(760) 392-4722

www.LaRonnaJojoba.com
laronna@earthlink.net
http://www.youtube.com/watch?v=pOwFa1tnpNc
"Nature's Perfect Gift From The California Desert"

E003-1

COMMENT SET E004
GEORGE HEPKER

George Hepker
850 River Drive
Norco, Ca 92860

May 1, 2012

To Whom it may concern;

E004-1

Re: Harvest Solar Project, Desert Center

I am a property owner in the area since 1971, near Pallen Pass Road.
I strongly favor this project.

For Decades, we have been trying to find a way to make our area, a place where we could live. Since Kaiser mine closed, our area has been struggling.

For a while it looked as though agriculture was going to be the busines we could depend on, but our dreams of a Jojoba future did not realize.

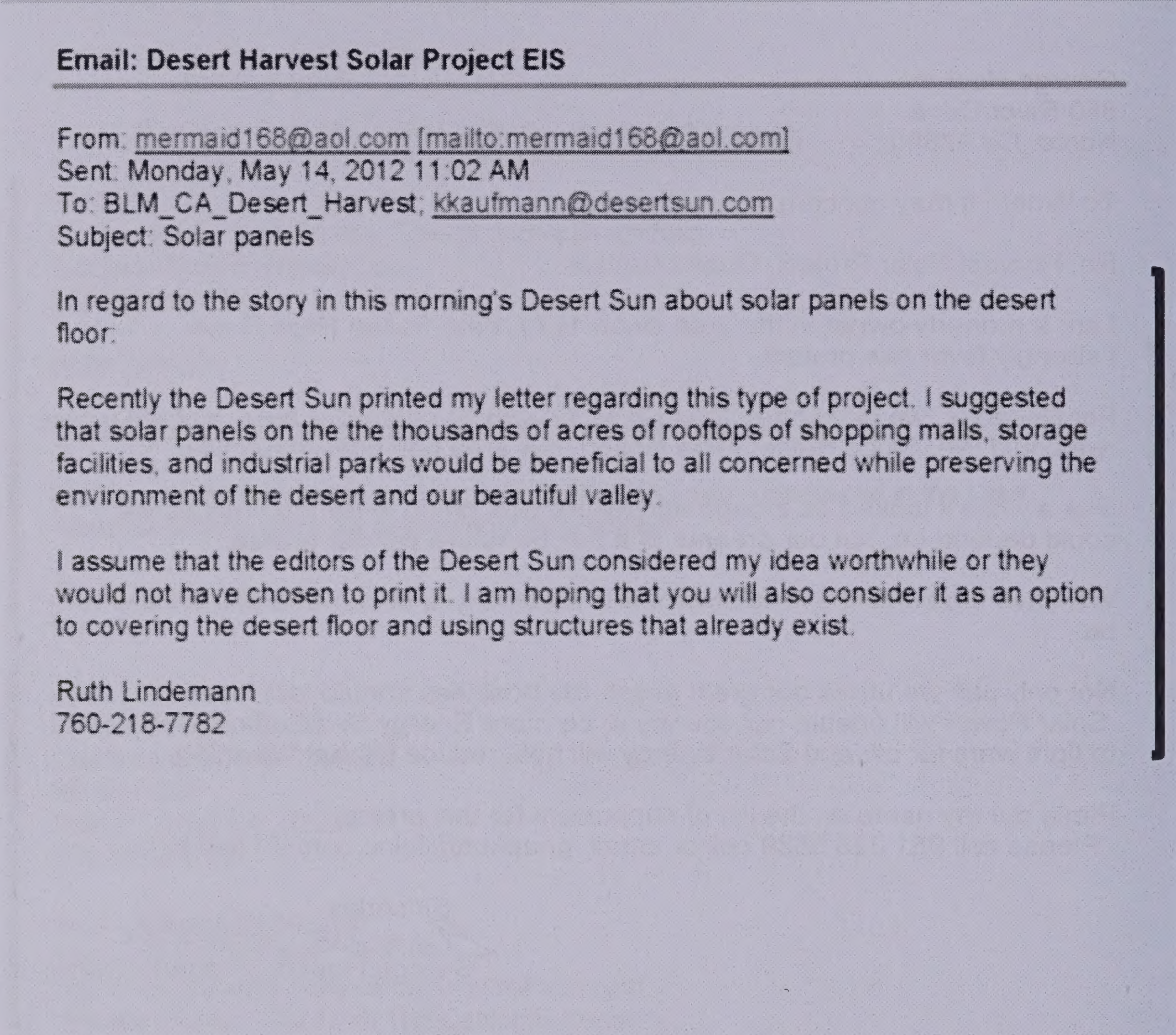
We have the sunshine, and always will. Electricity is in demand and always will be.

Not only can we utilize our great asset, the business should last forever.
Solar Power will enable our country to be more Energy Self Sufficient so as not to fight wars for oil, and Solar Energy will help reduce Global Warming.

Plese put my name on the list of supporters for this project.
Please call 951 323 5539 cell or email ghepker@ilbinc.com if I can help.

Sincerley
George Hepker
George Hepker, Property Owner

COMMENT SET E005
RUTH LINDEMANN



Email: Desert Harvest Solar Project EIS

From: mermaid168@aol.com [mailto:mermaid168@aol.com]
Sent: Monday, May 14, 2012 11:02 AM
To: BLM_CA_Desert_Harvest; kkaufmann@desertsun.com
Subject: Solar panels

In regard to the story in this morning's Desert Sun about solar panels on the desert floor:

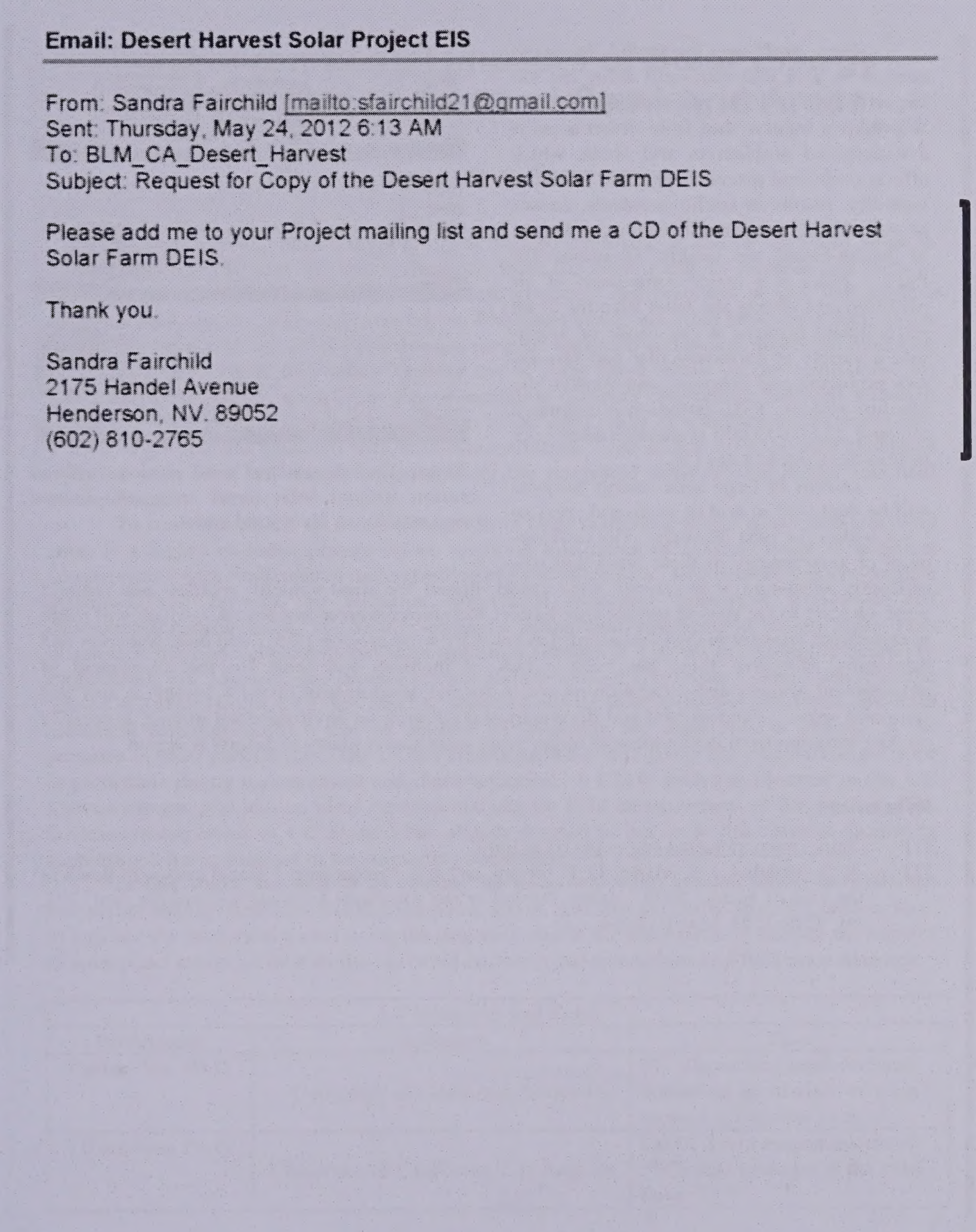
Recently the Desert Sun printed my letter regarding this type of project. I suggested that solar panels on the the thousands of acres of rooftops of shopping malls, storage facilities, and industrial parks would be beneficial to all concerned while preserving the environment of the desert and our beautiful valley.

I assume that the editors of the Desert Sun considered my idea worthwhile or they would not have chosen to print it. I am hoping that you will also consider it as an option to covering the desert floor and using structures that already exist.

Ruth Lindemann
760-218-7782

E005-1

COMMENT SET E006
SANDRA FAIRCHILD



Email: Desert Harvest Solar Project EIS

From: Sandra Fairchild [mailto:sfairchild21@gmail.com]
Sent: Thursday, May 24, 2012 6:13 AM
To: BLM_CA_Desert_Harvest
Subject: Request for Copy of the Desert Harvest Solar Farm DEIS

Please add me to your Project mailing list and send me a CD of the Desert Harvest Solar Farm DEIS.

Thank you.

Sandra Fairchild
2175 Handel Avenue
Henderson, NV. 89052
(602) 810-2765

E006-1

COMMENT SET E007
YANBAO MA

E007-1

Dust emissions generated by wind erosion in arid and semi-arid areas are the largest source of PM_{10} pollution in USA [1]. Windblown fugitive dust from desert areas is a widespread problem in arid areas, which affects crops and native vegetation, obstructs visibility, results in traffic accidents, causes property damage, and contributes to violations of health-based air quality standards for PM_{10}. PM_{10} is a major component of air pollution and among the most harmful of all air pollutant because it can cause or aggravate a variety of cardiovascular and respiratory problems and illnesses, and weaken the immune system. PM_{10} pollution is estimated to cause 22,000-52,000 premature deaths per year in the United States [2].

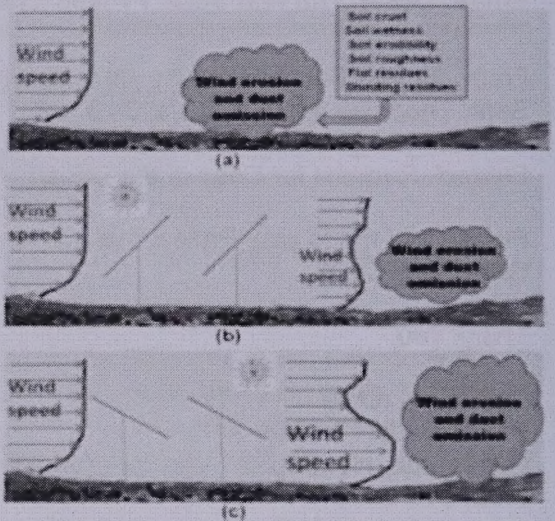


Figure 1. Schematic of wind erosion: (a)Wind erosion without solar panel array; (b) Frontal wind attack; (c) Rear wind attack.

Dozens of large solar energy projects will be deployed in arid or semi-arid areas in USA within the next 30 years. The development of solar energy in these areas can significantly accelerate or decelerate wind speed, distort the wind velocity profiles, and redirect wind adjacent to the ground surface (see **Error! Reference source not found.**), which will result in significant changes in dust emissions generated by wind erosion [3-5], and dust transport and deposition. However, there has been a lack of methods and tools for the assessment of environment impacts and mitigation measures for the development of solar energy in arid and semi-arid areas. Fundamental and developmental research on environmental impact, especially on dust emission from deployment of utility scale solar power plants in deserts is urgent.

References

[1] "http://www.gbuapcd.org/ovpm10sip.htm."

[2] A. H. Mokdad, J. S. Marks, D. F. Stroup, and J. L. Gerberding, "Actual causes of death in the United States, 2000," *Jama-Journal of the American Medical Association*, vol. 291, pp. 1238-1245, Mar 10 2004.

E007-2

Environmental Impacts of Solar Energy Development in Arid and Semi-Arid Areas

Executive Summary

Dozens of large solar energy projects will be deployed in arid or semi-arid areas in California within the next 30 years. However, there has been a lack of methods and tools to assess potential environmental impacts of these projects. This proposed project will explore environmental impacts, especially windblown PM_{10} dust emissions, from large scale solar plants in arid and semi-arid areas. We propose a synergetic approach combining numerical modeling and field measurements to evaluate the impacts of solar panel arrays on dust emissions. An integrated wind erosion model, capable of modeling complex interactions between turbulent flows over solar panel arrays and soil physics in the early stage of windblown dust emissions, will be developed and validated with field measurements. The effects on PM_{10} dust emissions from the solar farm will be investigated using the integrated wind erosion model and field measurements.

To study the effects on dust emissions from large scale solar plants in arid and semi-arid areas is a highly multidisciplinary effort, requiring integration of a broad range of technical advancements with fundamental understanding of fluid mechanics, aerodynamics, micro-particle dynamics, soil physics, air pollution, theoretical modeling, numerical simulation and experimental measurement. We have assembled a unique team consisting of leading researchers in aerodynamics and computational fluid dynamics (Professor Yanbao Ma, from the School of Engineering, UC Merced), and aerosol science and technology (Professor Yifang Zhou from the School of Public Health, UCLA). The UC Merced complex flow group has developed advanced numerical techniques which can be applied for modeling the wind erosion process in the presence of solar panel arrays. The UCLA environmental health group has extensive experience in particulate matter measurement and characterization. A 1 MW solar farm located on the UC Merced campus provides an ideal experimental site for field measurements of this project. The facilities management of UC Merced has already granted us access to this research facility (a supporting letter is attached in the supporting document).

In this study, we aim to a) develop an integrated wind erosion model to study the interaction among wind flow fields, solar panel arrays, and dust emissions from the land surface; b) validate the numerical model using the data collected at the solar farm; c) analyze the impacts of solar panel arrays on dust emissions based on numerical simulations and field measurements.

Participants and Roles		
Participants	Institution	Role
Yanbao Ma, Ph.D.	University of California, Merced	PI- Theoretical modeling and numerical simulations of wind erosion at the solar farm
Yifang Zhu, Ph.D.	University of California, Los Angeles	Co-PI- Field measurements of PM_{10} dust emission at the solar farm

1

COMMENT SET E008
PHILIP M. KLASKY

Email: Desert Harvest Solar Project EIS

From: Philip M. Klasky <pklasky@igc.org>
Sent: Monday, July 16, 2012 11:11 AM
To: BLM_CA_Desert_Harvest
Subject: Comments on Proposed Desert Harvest Solar Swath Project

IMPORTANT: Please acknowledge receipt of this email

Philip M. Klasky
P.O. Box 1722
29 Palms, California 92277

To: Lynnette Elser
California Desert District Office
22835 Calle San Juan de Los Lagos
Moreno Valley, California 92553

Sent via email to: cadeserthaverst@blm.gov

Re: Comments on the Proposed Desert Harvest Solar Swath Draft EIS

E008-1

I am writing as a desert resident who opposes the proposed Desert Harvest Solar Swath (DHSP) because it will destroy invaluable habitat for the endangered desert tortoise (*Gopherus agassizii*), adversely impact the viewshed, generate PM 10 and 2.5 pollutants and is unnecessary given the alternatives.

I am a member of the Alliance for Responsible Recreation (ARR) and the Bay Area Nuclear (BAN) Waste Coalition. The ARR is a plaintiff in a lawsuit that successfully sued the BLM regarding the designation of off-road vehicle routes that were shown to potentially adversely impact threatened, sensitive and endangered species; and the BAN Waste Coalition was a plaintiff in the *Desert Tortoise v. Babbitt* lawsuit that stopped the construction of a proposed nuclear waste dump at Ward Valley using the protections of the Endangered Species Act.

The desert is not a wasteland to be abused to generate electricity for urban centers. The BLM is responsible for conducting a thorough environmental impact analysis of the proposed action according to the mandates of the National Environmental Policy Act (NEPA). The desert is a fragile environment with threatened, sensitive and endangered species protected by both federal and state law.
1. Alternatives - the National Environmental Policy Act requires that federal agencies consider alternatives to proposed actions. These alternatives must include other means of generating solar electricity including industrial and residential rooftop solar and the use of brownfields, abandoned agricultural lands and other locations. In addition, the long range transmission and the resultant loss of energy makes this project inefficient when compared to means of generating electricity closer to the consumer. The BLM is mandated by federal law to consider a "No Project" alternative.

COMMENT SET E008, CONT.
PHILIP M. KLASKY

The problems with the project as proposed includes the following: E008-1 cont.

o The loss of power through long-range transmission is inefficient and unnecessary. This can be solved by generating solar electric power closer to where it will be consumed. This is a problem associated with all projects that generate electricity in desert areas to be transmitted long distances to urban areas. E008-2

o Transmission towers provide roosting for ravens that prey on desert tortoises. The scientific literature contains numerous references to the role of transmission towers in increased predation of the endangered desert tortoise by providing roosting opportunities for ravens. E008-3

Therefore, a biological opinion must be conducted to analyze the impact of the proposed transmission towers on the desert tortoise - a species in a precipitous decline due to a number of accumulated factors. In addition, the construction of the transmission towers would cause further environmental damage and destruction of habitat for a myriad of species that depend on resident vegetation and undisturbed soils. E008-4

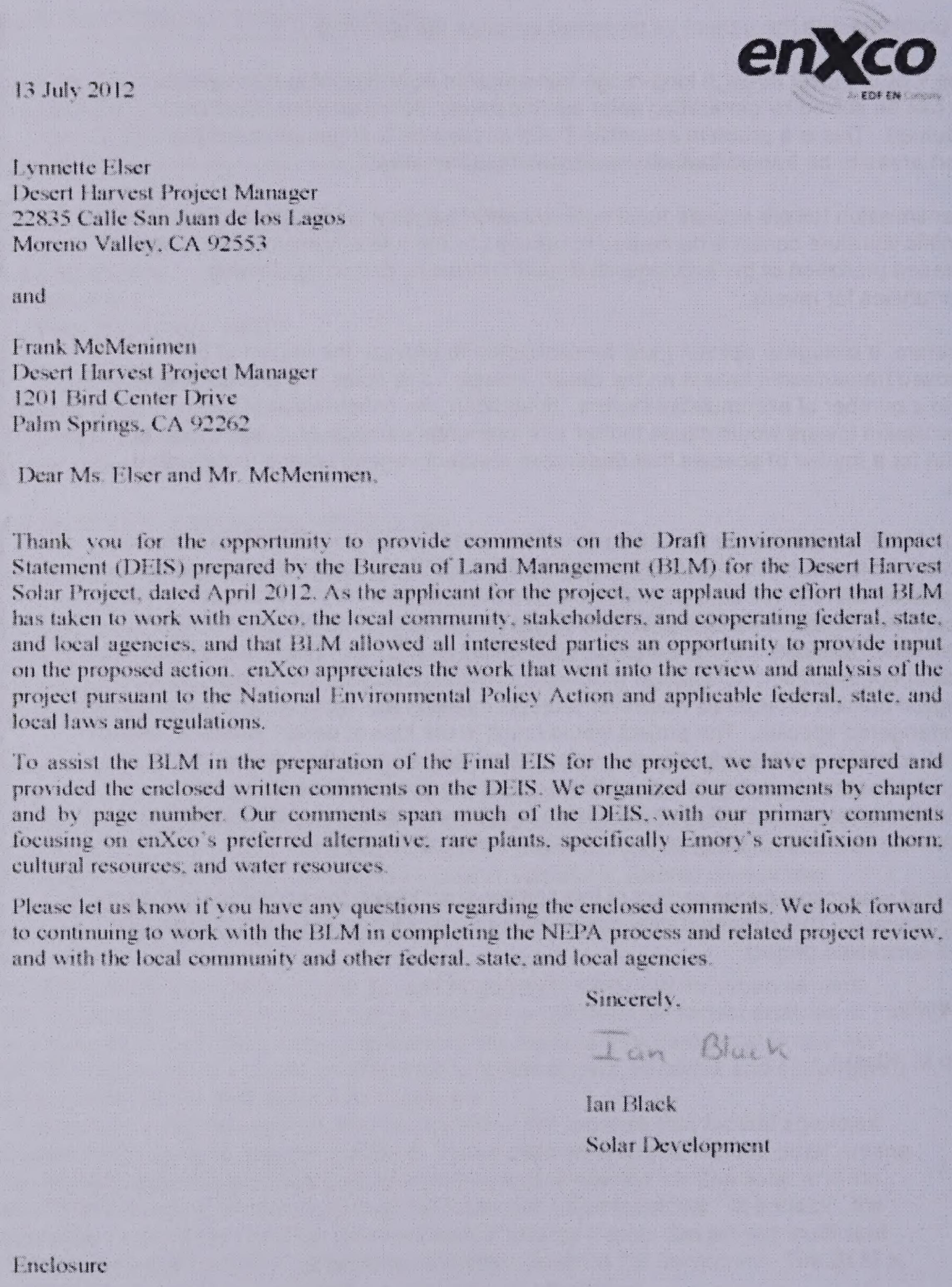
o The DHSP would require the relocation of the endangered desert tortoise. Studies show that relocation WILL RESULT IN DESERT TORTOISE MORTALITY and causes competition with the resident population where the tortoises will be relocated. In fact, the proposal for the relocation of tortoises is in direct conflict with the recovery and conservation mandates of the Endangered Species Act (ESA). The proposal for relocation of the desert tortoises at this location will expose the BLM to legal action. A biological opinion is required whenever projects threaten the recovery and conservation of endangered species. The project would result in the loss of desert tortoises, destroy wildlife corridors essential for the recovery and conservation of the species and is an action that cannot be mitigated given the fact that the species is declining from cumulative impacts and will soon be unable to achieve minimum viable population. For this reason alone, the BLM should not proceed with this project. E008-5

I ask that you acknowledge receipt of this comment and keep me appraised of the on-going process. This comment provides standing for any future legal action regarding this ill-conceived project.

Sincerely,

Philip M. Klasky

COMMENT SET F001
ENXCO



enXco
An EDF EN Company

13 July 2012

Lynnette Elser
Desert Harvest Project Manager
22835 Calle San Juan de los Lagos
Moreno Valley, CA 92553

and

Frank McMenimen
Desert Harvest Project Manager
1201 Bird Center Drive
Palm Springs, CA 92262

Dear Ms. Elser and Mr. McMenimen,

F001-1 Thank you for the opportunity to provide comments on the Draft Environmental Impact Statement (DEIS) prepared by the Bureau of Land Management (BLM) for the Desert Harvest Solar Project, dated April 2012. As the applicant for the project, we applaud the effort that BLM has taken to work with enXco, the local community, stakeholders, and cooperating federal, state, and local agencies, and that BLM allowed all interested parties an opportunity to provide input on the proposed action. enXco appreciates the work that went into the review and analysis of the project pursuant to the National Environmental Policy Action and applicable federal, state, and local laws and regulations.

To assist the BLM in the preparation of the Final EIS for the project, we have prepared and provided the enclosed written comments on the DEIS. We organized our comments by chapter and by page number. Our comments span much of the DEIS, with our primary comments focusing on enXco's preferred alternative; rare plants, specifically Emory's crucifixion thorn; cultural resources; and water resources.

Please let us know if you have any questions regarding the enclosed comments. We look forward to continuing to work with the BLM in completing the NEPA process and related project review, and with the local community and other federal, state, and local agencies.

Sincerely,

Ian Black

Ian Black

Solar Development

Enclosure

COMMENT SET F001, CONT.
ENXCO

enXco Comment Letter
Desert Harvest Draft EIS

Executive Summary

F001-1 cont.

Pages ES-7 through ES-8. In some instances, Table ES-1, CEQA Significant Impacts and Mitigation does not correspond with the conclusions of Chapter 4 of the EIS. enXco recommends the following revisions to conform Table ES-1 to the conclusions of Chapter 4 of the EIS:

Impact Criterion AR-2 does not pertain solely to emissions that would have residual impacts but rather directs the analysis to consider whether project emissions contribute to an existing or projected air quality violation. As such, the CEQA Significance Determination concludes that the proposed project would have temporary significant and unavoidable NOx and PM10 impacts during construction [DEIS at pg. 4.2-26]. VOC and CO should be deleted from Tables ES-1 and 4.24-2.

F001-2

Table ES-1, Significance Criterion VEG-1 understates the mitigation value of off-site compensation by failing to note that it offsets a net loss of habitat by permanently preserving otherwise unprotected habitat. Please refer to enXco's comment on page 4.3-36, below.

F001-3

Table ES-1, Significant Criterion WIL-2 does not correspond with the cumulative analysis in Section 4.4.16 which concludes that because the DHSP project site is modeled as low habitat value and has low density of tortoises and their sign, " ... the contribution of the proposed project or its alternatives would be relatively minor." [DEIS at 4.4.62]. Please see our corresponding comment regarding page 4.4-65, below.

F001-4

Table ES-1, CR-1 and CR-2. enXco has submitted extensive comments on the Cultural Resources section of the EIS and requests revision of this table to reflect the NRHP status of each resource and include only those that are NRHP-eligible or unevaluated in the analysis of Project effects. The total of newly discovered resources has increased from 21 to 25, but 16 of those are isolated artifacts, not considered eligible for the NRHP. Additionally, this section refers to MM CUL-1 through MM CUL-9 and discusses an MOA and HPTP. MM CUL-8 and CUL-9 were not introduced in Section 4.6.16 and we presume that they have been eliminated. More important, none of the other Mitigation Measures discusses an MOA or HPTP, but perhaps should. MM CUL-2 (page 4.6-7) describes a Monitoring and Treatment Plan. Typically if a project is determined under Section 106 to have an adverse effect on historic properties, the resolution of adverse effects is memorialized in an MOA document and treatments are detailed in an HPTP. If the BLM anticipates a Finding of Adverse Effect for the project, reference to the agreement and treatment documents should be made within MM CUL-2.

F001-5

Table ES-1, Significance Criterion NZ-4 threshold of significance is specific to "long-term impacts on noise sensitive land uses by increasing long-term ambient CNEL levels by 10dBA or more". As a physical matter, this standard should not trigger a significant and unmitigable impact north of Lake Tamarisk Road because there are no sensitive receptors located north of

COMMENT SET F001, CONT.
ENXCO

Lake Tamarisk Road where the short-term impact (two years during construction) would occur. The description of the threshold should note that this is a conservative conclusion based on the 10 dBA standard rather than on actual sensitive receptors. F001-5 con

Table ES-1, Significance Criterion V-5 for Visual Resources should be stricken from Table ES-1 and Table 4.24-2. As noted in the Draft EIS [DEIS at page 4.19-44], "The low-to-high degrees of visual change that would be caused by Alternative 4 would be allowed under the applicable Interim VRM Class IV management objective. … Therefore, the resulting visual impact would be less than significant under this criterion." F001-6

Because of the inconsistencies, Table ES-1 and Table 4.24-2 should be revised as follows [DEIS at page ES-6]:

Table ES-1. CEQA Significant Impacts and Mitigation

Impact Area	Sig. Criterion	Significant Unavoidable Impact	Description
Air Resources	AR-2	Construction emissions	Construction of the project would generate emissions of particulate matter (PM2.5 and PM10), VOC, CO, and NOx. Mitigation Measures AIR-1 through AIR-4 would limit these emissions to the extent possible, but residual impacts from PM10 ~~, VOC, CO,~~ and NOx ~~would persist after mitigation~~could cause localized exceedances or contribute to existing exceedances of State and federal air quality standards. Significant, unavoidable impacts would be temporary; these impacts would be limited to the duration of construction activities.
Biology – Vegetation	VEG-1	Cumulative impacts to sensitive natural communities	Even with implementation of Mitigation Measures VEG-1 through VEG-10, the project would represent a considerable contribution to the cumulatively significant regional impacts to sensitive natural communities. Although acquisition does not address the net loss of habitat in the immediate future (a temporal net loss of habitat), it is expected to prevent future losses of habitat by placing a permanent conservation easement and deed restrictions on private lands that could otherwise be converted for urban, agricultural, or energy development.
Biology – Vegetation	VEG-2	Cumulative impacts to jurisdictional streambeds	Even with implementation of Mitigation Measures VEG-1 through VEG-10, the project would represent a considerable contribution to the cumulatively significant regional impacts to state-jurisdictional streambeds.
Biology - Wildlife	WIL-1	Cumulative impacts to special-status species	Even with implementation of mitigation, the residual impacts of the project would represent an individually- minor but cumulatively considerable contribution to reduced wildlife movement and connectivity in the upper Chuckwalla Valley.

COMMENT SET F001, CONT.
ENXCO

enXco Comment Letter
Desert Harvest Draft EIS

F001-6 cont.

Table ES-1. CEQA Significant Impacts and Mitigation

Impact Area	Sig. Criterion	Significant Unavoidable Impact	Description
Biology - Wildlife	WIL-2	Cumulative impacts to wildlife movement	Even with implementation of mitigation, the residual impacts of the project would represent an individually minor but cumulatively considerable contribution to reduced wildlife movement and connectivity in the upper Chuckwalla Valley.
Cultural Resources	CR-1 and CR-2	Adverse change to historic and archaeological resources	The project would result in direct and indirect impacts during construction, operation, and decommissioning to cultural resources, including adverse change to the significance of historic and archaeological resources. Mitigation Measures MM CUL-1 through MM CUL-9 would reduce impacts by developing and implementing a Memorandum of Agreement and Historic Properties Treatment Plan, requiring monitoring and training for all construction personnel, and treating/curating inadvertent discoveries. However, some impacts, particularly to the setting of the North Chuckwalla Petroglyph District (CA-RIV-1383, NRHP-listed), may be significant and unavoidable under CEQA.
Noise and Vibration	NZ-4	Increase in noise levels along Kaiser Road	The project would result in a substantial increase in traffic noise levels during construction and decommissioning along Kaiser Road north of Lake Tamarisk Road. This impact would result from an increase in more than 10 dBA rather than impacts to sensitive receptors as there are no sensitive receptors along Kaiser Road north of Lake Tamarisk Road. Mitigation Measure NOI-1would limit construction activities to daylight hours; however, there would still be a significant unavoidable impact from project construction.
Visual Resources	V-1	Scenic vistas	Project would be prominently visible from elevated vantage points in the area, and the introduction of industrial character and structural visual contrast would result in significant unavoidable impacts to these scenic vistas.
Visual Resources	V-3	Degrade visual character of the landscape	Project would introduce a prominent built facility with considerable industrial character into an existing landscape presently absent such features, causing a substantial degradation of the existing visual character or quality of the site and its surrounding landscape when viewed from the elevated viewpoints in the wilderness areas.
~~Visual Resources~~	~~V-5~~	~~Long-term inconsistency with established BLM VRM class objectives~~	~~The moderate to high degree of visual change that would be caused by the project (as viewed from I-10) would result in a long-term (greater than five years) inconsistency with the applicable Interim VRM Class III.~~
Visual Resources	V-6	Inconsistency with local policies	The moderate to high degree of visual change that would be caused by the proposed solar farm would not be consistent with the following Riverside County General Plan policies: LU 4.1, LU 13.1, LU 13.3, LU 13.5, LU 13.8, LU 20.1, LU 20.2, LU 20.4, DCAP 2.3, DCAP 9.1, and DCAP 10.1.

COMMENT SET F001, CONT.
ENXCO

F001-6 co

Table ES-1. CEQA Significant Impacts and Mitigation

Impact Area	Sig. Criterion	Significant Unavoidable Impact	Description
Visual Resources	V-7	Cumulative visual alteration	The presence of the project would substantially contribute to cumulative visual alteration. There are no mitigation measures available to reduce this impact.

F001-7

Page ES-9. enXco suggests the following edit to match our comments on Pages 4.20-20 through 4.20-23, below:

"Finally, the Lead Agencies must decide whether to adopt a mitigation measure for groundwater resources that would protect the Chuckwalla Valley Groundwater Basin from overdraft conditions attributed to the DHSP. Such a measure ~~would~~ could also contribute to unavoidable adverse air quality effects and adverse effects on noise and traffic."

Chapter 1 – Introduction and Purpose and Need

F001-8

Page 1-4. We recommend the following correction regarding Secretarial Order 3285A1:

"Secretarial Order 3285A1, dated ~~February 22, 2010~~March 11, 2009, and amended on February 22, 2010, ~~which~~ establishes the development of renewable energy as a priority for the Department of the Interior."

F001-9

Page 1-5. Please correct the applicant objectives list as follows in order to render it consistent with the version submitted to BLM by enXco on 13 February 2012: "To maximize operational efficiency and provide low-cost renewable energy by locating the project on ~~contiguous~~ lands with high solar insolation values."

Chapter 2 – Description of the Proposed Action and Alternatives

F001-10

Page 2-6. Chapter 2 of the DEIS describes the proposed project as using "either high-profile or low-profile trackers". [DEIS at 2-6]. enXco does not propose to use low-profile trackers. Instead, enXco proposes to develop both the northern and southern parcels of the proposed project with high-profile trackers as submitted by enXco since 5 October 2011. This arrangement is the same as Alternative 7 of the DEIS, which assumes high-profile (15-foot) trackers, but includes high-profile trackers on the southern parcel as well, consistent with the footprint of proposed project Alternative 4 of the DEIS. enXco's preferred alternative would produce more renewable energy in the acreage requested than any of the alternatives considered in the DEIS. Using the more efficient high-profile tracking system would allow the project to produce greater megawatt hours than using a low-profile tracking system. As such, enXco's preferred is more efficient and produces more electricity than any of the alternatives considered

COMMENT SET F001, CONT.
ENXCO

enXco Comment Letter
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F001-10 cont.

in the DEIS and therefore best helps BLM meet its national energy policy goals, as set forth in the Energy Policy Act of 2005.

This change in height of single-axis trackers is a minor variation of Alternative 4 that is within the spectrum of alternatives considered by the DEIS, namely, the high-profile Alternative 7. (*See*, BLM NEPA Handbook [H-1790-1] pgs. 29-30). It does not result in environmental effects significantly different from those analyzed in the DEIS. (*See*, 43 C.F.R. 46.120). enXco's preferred alternative therefore does not require supplementation of the DEIS. To substantiate this conclusion, enXco considered the NEPA Adequacy Criteria of Appendix 8 of the BLM NEPA Handbook, as follows:

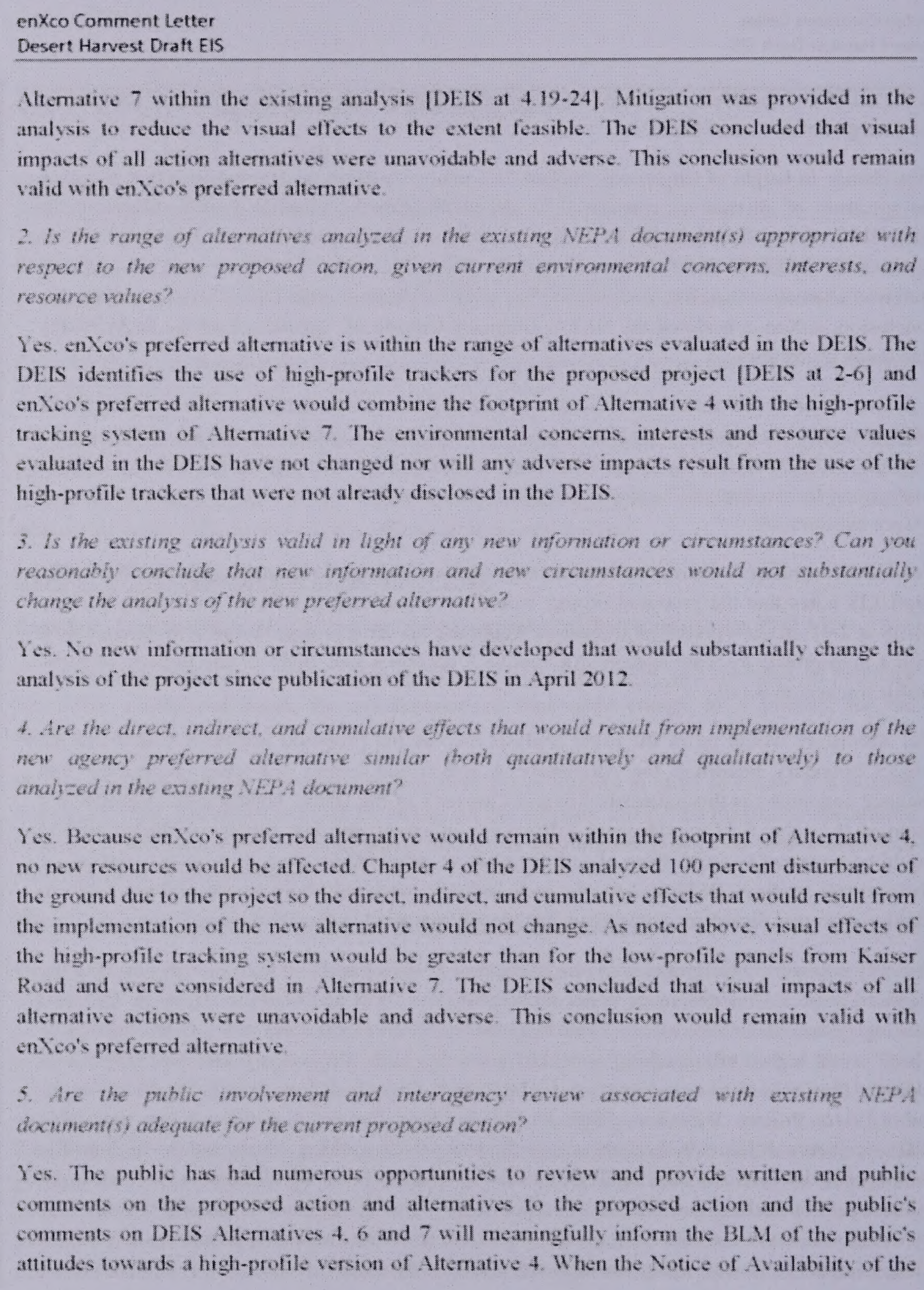
1. Is the new proposed action a feature of, or essentially similar to, an alternative analyzed in the existing NEPA document(s)? Is the project within the same analysis area, or if the project location is different, are the geographic and resource conditions sufficiently similar to those analyzed in the existing NEPA document(s)? If there are differences, can you explain why they are not substantial?

Yes. enXco's preferred alternative is essentially similar to alternatives analyzed in the DEIS. The Draft EIS notes that the proposed project would use either high-profile or low-profile trackers [DEIS at 2-6]. enXco's preferred alternative would use the same project footprint as Alternative 4 with a high-profile tracking system. Alternative 7 describes and analyzes the impacts of high-profile trackers in detail.

The alternative would be in the same analysis area as the proposed action. It would use the project boundary identified for Alternative 4 and would impact the same geographic and resource conditions as those described in and Chapter 3 of the DEIS. Additionally, Alternative 4 assumed the solar field would cover 1,208 acres in extent and 100 percent of the solar field would be impacted by some form of soil disturbance, either from compaction, micro-grading, or disc-and-roll grading [DEIS at 2-6]. As such, enXco's preferred alternative would not result in additional ground disturbance outside of that already analyzed in the DEIS.

The only noteworthy difference is the installation of 15-foot panels on the southern parcel of the proposed project. This difference is not substantial. The DEIS analyzed the effects of a 15-foot tracking system under Alternative 7 and analyzed the relative difference in the visual impacts of a low- versus high-profile tracking system by analyzing both Alternative 6 and Alternative 7. In addition, the DEIS shows (in Figures 3.19-1a, Project Viewshed: Low Profile Tracking Panels, and 3.19-1c, Project Viewshed: High Profile Tracking Panels) that there is no noticeable difference between the viewshed impacts of the low-profile tracking panels and the high-profile tracking panels when assumed for both parcels of Alternative 4. The difference between high- and low-profile tracking panels is also barely discernible (if at all) from all but one relevant Key Observation Point of the DEIS (i.e., KOPs 1, 2, 4 and 8). While the higher panels would result in a larger impact to viewers along Kaiser Road (KOP 3), this impact was already considered under

COMMENT SET F001, CONT.
ENXCO



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Alternative 7 within the existing analysis [DEIS at 4.19-24]. Mitigation was provided in the analysis to reduce the visual effects to the extent feasible. The DEIS concluded that visual impacts of all action alternatives were unavoidable and adverse. This conclusion would remain valid with enXco's preferred alternative. F001-10

2. Is the range of alternatives analyzed in the existing NEPA document(s) appropriate with respect to the new proposed action, given current environmental concerns, interests, and resource values? F001-11

Yes. enXco's preferred alternative is within the range of alternatives evaluated in the DEIS. The DEIS identifies the use of high-profile trackers for the proposed project [DEIS at 2-6] and enXco's preferred alternative would combine the footprint of Alternative 4 with the high-profile tracking system of Alternative 7. The environmental concerns, interests and resource values evaluated in the DEIS have not changed nor will any adverse impacts result from the use of the high-profile trackers that were not already disclosed in the DEIS.

3. Is the existing analysis valid in light of any new information or circumstances? Can you reasonably conclude that new information and new circumstances would not substantially change the analysis of the new preferred alternative? F001-12

Yes. No new information or circumstances have developed that would substantially change the analysis of the project since publication of the DEIS in April 2012.

4. Are the direct, indirect, and cumulative effects that would result from implementation of the new agency preferred alternative similar (both quantitatively and qualitatively) to those analyzed in the existing NEPA document? F001-13

Yes. Because enXco's preferred alternative would remain within the footprint of Alternative 4, no new resources would be affected. Chapter 4 of the DEIS analyzed 100 percent disturbance of the ground due to the project so the direct, indirect, and cumulative effects that would result from the implementation of the new alternative would not change. As noted above, visual effects of the high-profile tracking system would be greater than for the low-profile panels from Kaiser Road and were considered in Alternative 7. The DEIS concluded that visual impacts of all alternative actions were unavoidable and adverse. This conclusion would remain valid with enXco's preferred alternative.

5. Are the public involvement and interagency review associated with existing NEPA document(s) adequate for the current proposed action? F001-14

Yes. The public has had numerous opportunities to review and provide written and public comments on the proposed action and alternatives to the proposed action and the public's comments on DEIS Alternatives 4, 6 and 7 will meaningfully inform the BLM of the public's attitudes towards a high-profile version of Alternative 4. When the Notice of Availability of the

COMMENT SET F001, CONT.
ENXCO

F001-14 cont.

FEIS is published in the Federal Register, a 30-day public availability period for the FEIS begins. During this time period, the BLM may receive comments on the FEIS, including enXco's preferred alternative. If the BLM receives any comments on the FEIS, those comments may be addressed in or prior to the Record of Decision (ROD).

F001-15

Page 2-11. Due to continued engineering of the project, enXco is providing additional information regarding the construction schedule and phasing of the project. The phasing revision does not alter the construction vehicles and equipment estimates of Tables 2-2 and 2-3. For ease of review, we have provided this information as direct edits to Chapter 2, as follows:

2.5.5 Construction Activities

Construction Schedule and Phasing

Construction is anticipated to commence during the ~~3rd~~2nd quarter of ~~2012~~2013, and continue through the ~~4th~~3rd quarter of ~~2014~~2015, in ~~two~~three phases. Commercial operation would also be phased and the first phase of operation would commence during the ~~3rd~~2nd quarter of ~~2013~~2014, with commercial operation of the final phase commencing during the ~~4th~~3rd quarter of ~~2014~~2015. The construction schedule would be as follows:

- Phase 1 Construction (10 acres): ~~Sept 2012 to November~~ April 2013 ~~(15~~to July 2013 (3 months)
- Phase 2 Construction (1,043 acres): ~~November~~September 2013 to ~~August 2014~~November 2014 (14 months)
- ~~Substation construction: late~~Phase 3 Construction (155 acres): November ~~2012~~2014 to ~~late February 2013 (3~~ May 2015 (6 months)

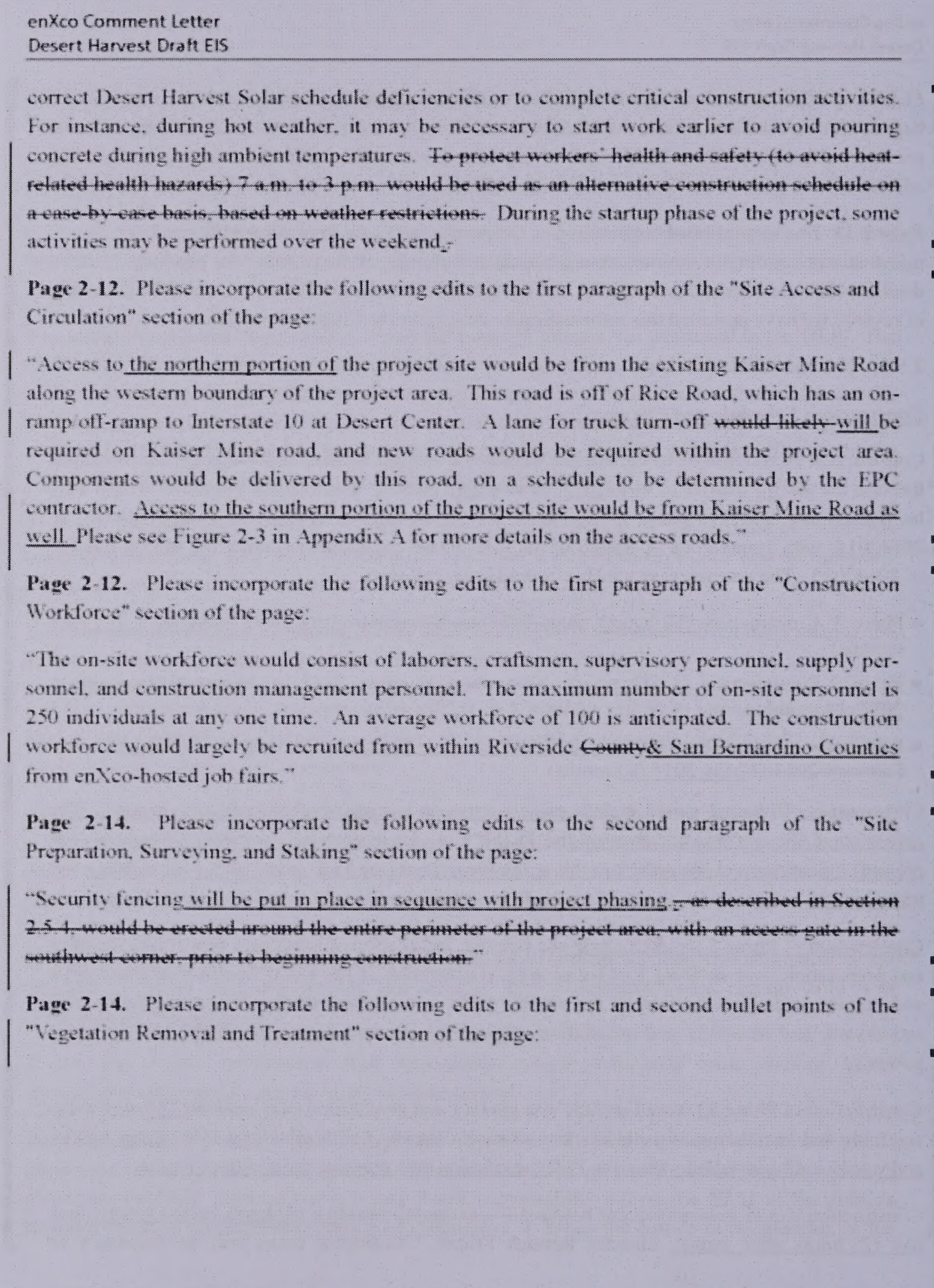
Construction of Phase 1 would include pre-construction surveys, exclusion fencing around a 10-acre area in the northwest corner of the DHSP site, desert tortoise exclusion (if tortoise are present), clearing and construction of a laydown yard, parking area, and pad mounts for transformers.

Construction of Phase 2 would include site fencing, installation of temporary power, site grading and preparation over ~~an 800~~a 1,043-acre area, construction of the O&M building (if necessary) and on-site roads, construction of the on-site wells, construction of the project substation and switchyard, and assembly and installation of panel blocks and wiring for ~~90~~137 MW of solar power.

Construction of Phase ~~2~~3 would include site grading and preparation over ~~an 400~~a 155-acre area, assembly and installation of panel blocks and wiring for ~~60~~13 MW of solar power. Panel blocks and would not be installed within the FERC exclusion area crossing the southern parcel.

Construction would generally occur ~~between 7 a.m. and 7 p.m.~~two (2) hours before sunrise and two (2) hours after sunset, Monday through Friday. Additional hours may be necessary to

COMMENT SET F001, CONT.
ENXCO



correct Desert Harvest Solar schedule deficiencies or to complete critical construction activities. For instance, during hot weather, it may be necessary to start work earlier to avoid pouring concrete during high ambient temperatures. ~~To protect workers' health and safety (to avoid heat-related health hazards) 7 a.m. to 3 p.m. would be used as an alternative construction schedule on a case-by-case basis, based on weather restrictions.~~ During the startup phase of the project, some activities may be performed over the weekend.~~,~~

F001-15 co

Page 2-12. Please incorporate the following edits to the first paragraph of the "Site Access and Circulation" section of the page:

"Access to the northern portion of the project site would be from the existing Kaiser Mine Road along the western boundary of the project area. This road is off of Rice Road, which has an on-ramp/off-ramp to Interstate 10 at Desert Center. A lane for truck turn-off ~~would likely~~ will be required on Kaiser Mine road, and new roads would be required within the project area. Components would be delivered by this road, on a schedule to be determined by the EPC contractor. Access to the southern portion of the project site would be from Kaiser Mine Road as well. Please see Figure 2-3 in Appendix A for more details on the access roads."

F001-16

Page 2-12. Please incorporate the following edits to the first paragraph of the "Construction Workforce" section of the page:

"The on-site workforce would consist of laborers, craftsmen, supervisory personnel, supply personnel, and construction management personnel. The maximum number of on-site personnel is 250 individuals at any one time. An average workforce of 100 is anticipated. The construction workforce would largely be recruited from within Riverside ~~County~~& San Bernardino Counties from enXco-hosted job fairs."

F001-17

Page 2-14. Please incorporate the following edits to the second paragraph of the "Site Preparation, Surveying, and Staking" section of the page:

"Security fencing will be put in place in sequence with project phasing. ~~, as described in Section 2.5.4, would be erected around the entire perimeter of the project area, with an access gate in the southwest corner, prior to beginning construction.~~"

F001-18

Page 2-14. Please incorporate the following edits to the first and second bullet points of the "Vegetation Removal and Treatment" section of the page:

F001-19

COMMENT SET F001, CONT.
ENXCO

- Soil disturbance in support of construction would increase the possibility of introduction of invasive species. Regular monitoring and weed management would be required during construction. Ongoing maintenance in the solar field may include treatment of noxious weeds by targeted spraying with ~~Roundup®~~ ~~(a~~ common ~~formulation~~formulations of the BLM accepted herbicide glyphosate~~)~~. F001-19 cont.
- Where temporary access is needed to install facilities, such as along the perimeter fencing, no removal of existing vegetation or grading would occur. Instead, equipment would drive over or around existing desert scrub vegetation without direct removal. Crushed vegetation is much more likely to show a rapid recovery than where vegetation is removed and reseeded, or where soils are disturbed. The Applicant is not expecting that final plans would require any disturbance outside the final perimeter fencing and internal engineered berms.

Page 2-14. Please incorporate the following edits to the second paragraph of the "Solar Array Assembly and Construction" section of the page: F001-20

"The laydown area is shown Figure 2-3 in Appendix A, as Phase 1. In general, material delivery for the solar field would maintain a constant flow, and panels and framing structures would be delivered throughout the solar field adjacent to the 1.44 MW subunit locations. These areas would be subsumed by the solar field as it is built out. Construction would proceed in an assembly-line fashion as each task is completed throughout the solar field."

Page 2-25. Section 2.8 asserts that Alternative 7 would have a nominal capacity of 150 MW. This is incorrect. Please revise according to enXco's comment on page 2-65, below, that the capacity will be 125 – 135MW. F001-21

Page 2-32. For clarification, enXco recommends a more detailed explanation in the first paragraph of Section 2.11.1 that the 60-foot extension of the Alternative C ROW into the adjacent Chuckwalla DWMA is required solely to accommodate intermittent "wind sway" of overhaning conductors over the DWMA boundary. F001-22

Page 2-38. Table 2-11 compares the solar facility action alternatives by environmental discipline. The table compares the alternatives' relative effects on Emory's crucifixion thorn, among other categories. However, the proposed project's site plan avoids almost all effects to Emory's crucifixion thorn by virtue of most of the plants being located within a setback from the SCE 161kV line transecting the southern parcel. As explained in our extensive comment on page 4.3-30, below, enXco could avoid the remaining plants through minor adjustments to the proposed project's site plan with a setback of 100 feet. We therefore recommend revising Table 2-11 and Section 4.3 of the DEIS to indicate that the proposed project design will for the most part avoid all identified Emory's crucifixion thorn, with implementation of Mitigation Measure MM VEG-7 requiring mitigation for any project impacts to Emory's crucifixion thorn that could not be avoided. F001-23

Page 2-64. Table 2-13 compares the relative severity of the effects of certain combined solar field and gen-tie alternatives by environmental discipline based on the conclusions from Tables F001-24

COMMENT SET F001, CONT.
ENXCO

F001-24 co

2-11 and 2-12. The values shown in Table 2-13 for visual effects do not reflect the conclusions drawn in Tables 2-11 and 2-12 and consequently overstate the visual impacts of Alternative 7. enXco recommends the following revisions to conform Table 2-13 to Tables 2-11 and 2-12. Please note that enXco did not revise the shading of the DEIS, but conforming edits in the FEIS will need to.

Environmental Discipline	4-B	4-C	4-D	4-E	5-B	5-C	5-D	5-E	6-B	6-C	6-D	6-E	7-B	7-C	7-D	7-E
Visual Resources	2	3	4	4	2	3	4	4	1	2	2	2	3~~5~~	5~~6~~	5~~6~~	5~~6~~

The edits above are consistent with the visual resources analysis of the DEIS, which concludes that the unavoidable visual effects of Alternative 6 are only slightly less than those of Alternative 7 for 7 of the 8 KOPs analyzed, with views from Kaiser Road being the only exception where the higher-profile Alternative 7 would be more noticeable.

F001-25

Page 2-65. Section 2.15 states that Alternative 7 is the agency preferred alternative because it would accommodate sufficient panels to generate 150 MW of renewable energy on fewer acres than the propose project. This statement is incorrect and did not come from the applicant; as noted in Comment Page 2-25 above, Alternative 7 would accommodate sufficient panels to hold 125 - 135 MWs. As noted in the applicant's submission to BLM dated 7 May 2012, in addition to a difference in capacity between alternatives, there is a significant difference in the efficiency of the racking used in each alternative. A fifteen-foot racking system has a higher efficiency rating and produces more energy per acre than a six-foot racking system. Please see the applicant's analysis of the relevant efficiencies of BLM's chosen alternatives, as follows:

	Alternative 4 150MW, 6' racking	Alternative 5 145MW, 6' racking	Alternative 6 125-135MW, 6' racking	Alternative 7 125-135MW,15' racking
Power Efficiency	16-18%	16-18%	16-18%	22-26%
Maximum Annual MWh	236,000	228,000	212,000	307,000

Please note that the financial viability of this project will depend on enXco's ability to use the most efficient racking (15-feet) and produce the maximum capacity of the site (150 MW). If Alternative 4 included enXco's proposed 15 foot racking, the maximum annual MWh would be

COMMENT SET F001, CONT.
ENXCO

341,000 MWh per year, greater than any other alternative considered in the DEIS, but using the same footprint as Alternative 4. Installing 15-foot racking on both the northern and southern parcels of the proposed project is therefore the best alternative to help BLM meet its national energy policy goals, as set forth in the Energy Policy Act of 2005. F001-25 cont.

Page 2-68. Please add the following to the end of the last paragraph of the "Private Land within Chuckwalla Valley" section of the page: "Finally, a private lands alternative would have substantially similar effects to a public lands project." F001-26

Page 2-70. Please add the following to the end of the second paragraph of the "Alternative BLM-Administered Land" section of the page: "In addition, the use of alternative BLM-administered land would have substantially similar effects, or possibly greater effects due to the decreased potential for shared ancillary facilities." F001-27

Page 2-72. enXco is a highly experienced wind developer and has determined that the project site is unsuitable for utility-scale wind development. Please revise the second paragraph of Section 2.17.5, as follows: F001-28

"The use of wind energy at the project locations~~ may be feasible~~ at the scale of the project ~~but it~~ would not eliminate significant impacts caused by the project; specifically, there would still be impacts on biological and cultural resources, and visual effects would be greater than with the proposed project. In addition, as shown in BLMs 2005 Programmatic EIS on Wind Energy Development, wind assessments in the area generally show less than commercially-viable wind speeds in the Chuckwalla Basin and wind energy at the project site would likely be economically infeasible."

Page 2-75. enXco recommends clarifying the third sentence of the "Environmental Impacts" paragraph on page 2-75 as follows: " ~~Of the 30 miles of~~Among the gen-tie line Alternatives illustrated in Figure 2-1 in Appendix A, about 6 miles would parallel a paved roadway (Kaiser Road). F001-29

Section 3.3 Biological Resources – Vegetation F001-30

Page 3.3-8, Section 3.3.3, last sentences of first paragraph under Vegetation, Habitat, and Jurisdictional Streambeds

"Vegetation mapping of gen-tie alignment Alternative E was completed by Aspen biologists in October 2011, and the ~~but the jurisdictional delineation of gen-tie alignment Alternative E has not yet been completed at the time of publication of this Draft EIS. J~~ jurisdictional delineation for Alternative E was ~~is scheduled to be~~ completed in spring of 2012."

Page 3.3-9, Section 3.3.3, first two paragraphs under Special-status Plant Species F001-31

COMMENT SET F001, CONT.
ENXCO

F001-31 co

"Field surveys for special-status plants have been conducted during spring and fall throughout the proposed solar facility site~~,~~ and ~~during fall~~ along gen-tie Alternative E. Botanical surveys on the other gen-tie alternative alignments were conducted for the DSSF project EIS (BLM 2011b), and this document incorporates by reference those survey results as described above. ~~Follow-up botanical surveys of gen-tie Alternative E will be completed during spring 2012.~~

Surveys were conducted throughout the larger, northeastern parcel by AMEC during spring 2010; throughout both parcels by Aspen Environmental Group (Aspen) during fall 2010; throughout the smaller southwestern parcel by Aspen during spring 2011; and along the eastern gen-tie line alignment (Alternative E) by Aspen during fall 2011 and spring 2012. In addition, incidental observations of flora, including special-status species, were recorded during all field work for the vegetation, habitat, and jurisdictional wetlands, described above. The following descriptions of methods and results of botanical surveys are summarized from AMEC's botanical report, with additional information from Aspen's field work. Details of these surveys are included in the Biological Resources Technical Report (BRTR) and BRTR Supplement for Generator Tie-line Alignment Alternative E , both located in Appendix C."

F001-32

Page 3.3-12. Section 3.3.3, Special-status Plant Species, first (partial) paragraph of page

"Additional late summer field surveys of gen-tie alignment Alternative E were completed in 2011 and spring surveys were ~~will be~~ completed during spring 2012~~; these surveys will be included in the Final EIS~~. Details of these surveys are located in Appendix C."

F001-33

Page 3.3-14. Section 3.3.5, Vegetation Communities, first paragraph under Creosote Bush Scrub (Sonoran Desert Scrub) on Partially Stabilized Sand Fields

"This area is located at the western margin of a much larger dune system ~~associated with Pinto Wash,~~ at the base of the Coxcomb Mountains."

F001-34

Page 3.3-15. Section 3.3.5, Vegetation Communities, first paragraph under Active Sand Dunes

"These dunes are at the western margin of the larger ~~Pinto Wash – Coxcomb Mountains~~ dune system described above."

F001-35

Beginning on page 3.3-16. Section 3.3.7, Special-status Plant Species, Table 3.3-2.

Please update special-status plant occurrences on gen-tie alignment alternative E according to the BRTR Supplement. Please add *Cryptantha costata* to the table.

F001-36

Page 3.3-21. Section 3.3.7, Special-status Plant Species, first (partial) paragraph of page (Coachella Valley milk-vetch)

"Specimens resembling Coachella Valley milk-vetch have been collected from the Pinto Wash and Palen dune system, northeast of Desert Center. However, the USFWS (2009; 2011) regards these as the related species, speckled milk-vetch (*A. lentiginosus* var. *variabilis*), which has no

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ENXCO

F001-36 cont.

special conservation status. The only portion of the proposed project or alternatives that would affect suitable habitat for Coachella Valley milk-vetch would be gen-tie Alternative E, which would cross some areas of dunes and partially stabilized aeolian sand habitat. Speckled milk-vetch occurs on the Alternative E alignment (Appendix C. [BRTR Supplement]). However, because the project study area is well outside the recognized geographic range, ~~this species~~ Coachella Valley milk-vetch is not expected to occur in the project area."

F001-37

Page 3.3-21. Section 3.3.7, Special-status Plant Species, middle of page (Chaparral sand-verbena)

There is some possibility that habitat adjacent to the solar facility site may support chaparral sand-verbena, especially along the access road margins near Highway 95. On gen-tie alignment Alternative E, there is a high probability that chaparral sand verbena could be found in sandy areas, particularly dunes and partially stabilized aeolian sand, along the alignment. It also could occur, with lower probability, along road or wash margins on the alignment.

F001-38

Page 3.3-21. Section 3.3.7, Special-status Plant Species, lower part of page (Harwood's woolly-star)

~~Gen-tie Alternative E would pass through suitable habitat for Harwood's woolly-star, which consists of areas of dunes and partially stabilized aeolian sand habitat. Spring botanical surveys will be conducted along gen-tie Alternative E in 2012 to determine presence or absence of this species.~~ Harwood's woolly-star was documented at multiple locations along portions of gen-tie alignment Alternative E crossing dunes and partially stabilized sand (see Figure 4 of Appendix C. [BRTR Supplement]). Because it is an annual plant, Harwood's woolly-star plants could be found in future years in other locations within the dunes or partially stabilized sand portions of the alignment.

F001-39

Page 3.3-22, Section 3.3.7, Special-status Plant Species, first (partial) paragraph of page (Mesquite nest-straw)

The only potential habitat in the project study area is along gen-tie alignment Alternative E, on valley floor drainages. Mesquite neststraw was not located during field surveys of gen-tie alignment alternative E and is not expected to occur in the project study area due to its apparent extirpation in California.

F001-40

Page 3.3-23, Section 3.3.7, Special-status Plant Species, new paragraph following Desert unicorn-plant

Ribbed cryptantha (*Cryptantha costata*): Ribbed cryptantha is an annual species found on windblown and stabilized sands, in the eastern Mojave and Sonoran Deserts in California, eastward into Arizona and south into Baja California. It flowers in spring. It is ranked as CRPR 4.3 (limited distribution, "watch list"). It is not managed by BLM as a sensitive species (BLM 2010a). It occurs throughout the dune habitat along gen-tie alignment alternative E (see Figure 4

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F001-40 co

of Appendix C. [BRTR Supplement]). In addition to these dunes, small patches of marginal habitat are present throughout the project study area on roadsides, washes, and other sandy areas. However, it has not been located on the proposed solar facility site or on gen-tie alignment Alternatives B, C, or D. Because it is an annual plant, ribbed crypantha plants could be found in future years in other locations within the dunes or partially stabilized sand portions of the alignment.

F001-41

Page 3.3-24. Section 3.3.9, Jurisdictional Resources, second paragraph under heading

The episodic system in the upper Chuckwalla Valley is within the closed Palen Dry Lake drainage basin. Due to the absence of a surface water connection to a traditional navigable waterway, or other jurisdictional criteria, stream channels in the area do not ~~appear to~~ fall within jurisdiction of the USACE as defined by Section 404 of the federal Clean Water Act. Consistent with this interpretation, the USACE determined that it does not hold jurisdiction on DHSP (Appendix C. [Corps confirmation letter]) or the adjacent DSSF project site (BLM 2011b). The USACE and Colorado River Basin Region (Water Quality Control Board Region 7) have not issued jurisdictional determinations on the proposed solar facility site at the time of publication of this ~~Draft~~ EIS.

F001-42

Section 3.4 Biological Resources – Wildlife

Page 3.4-1. Section 3.4.1, Bald and golden Eagle protection Act, last paragraph of page

The Bald and Golden Eagle Protection Act of 1940 (BGEPA) (16 USC, 668, enacted by 54 Stat. 250) protects bald and golden eagles by prohibiting the taking, possession, and commerce of such birds and establishes civil penalties for violation of this act. The BGEPA defines '*take*' to include "pursuing, shooting, shooting at, poisoning, wounding, killing, capturing, trapping, collecting, molesting, and disturbing." The USFWS (2007) further defines '*disturb*' as ~~Under BGEPA, take includes "disturb," which means~~ "to agitate or bother a bald eagle or a golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."

The USFWS (2009) can authorize take of bald and golden eagles according to specific regulations. Authorized take must be associated with, but not the purpose of, an otherwise lawful activity, and cannot practicably be avoided (50 CFR § 22.26). In order to authorize take, the USFWS must determine that the proposed action is consistent with the goal of maintaining stable or increasing breeding eagle populations. That is, any authorized take must be offset or mitigated by the proposed action.

US Fish and Wildlife Service (USFWS). 2007. Protection of eagles; definition of "disturb." Federal Register 72:31132-31140 (5 Jun).

COMMENT SET F001, CONT.
ENXCO

US Fish and Wildlife Service (USFWS). 2009. Eagle permits; take necessary to protect interests in particular localities. Federal Register 74:46836-46879 (11 Sep). F001-42 cont.

F001-43

Page 3.4-8. Section 3.4.3. Wildlife methodology, partial paragraph beneath Table 3.4-1

Biological resources surveys were conducted within the proposed generation facility site and ~~certain~~ gen-tie line Alternative E ~~alternatives~~ from January ~~to October~~ 2011 through May 2012. Biological resource surveys for gen-tie line Alternatives B ~~and~~ C and D were conducted in connection with the adjacent DSSF project (see below for more details). Field surveys specific to wildlife resources include general reconnaissance, desert tortoise surveys, a Mojave fringe-toed lizard habitat evaluation, and avian point-count surveys. A Biological Resources Technical Report (BRTR) and a BRTR supplement addressing gen-tie line Alternative E (Appendix C) have~~s~~ been prepared that incorporate~~s~~ the results of all field surveys and literature reviews conducted for the proposed project and alternatives to characterize the biological resources that could be directly or indirectly impacted by implementation of the DHSP. The methodology and results for assessing baseline conditions with regard to biological resources are summarized here. Please see the BRTR and BRTR Supplement (Appendix C) for further details.

F001-44

Page 3.4-9. Section 3.4.3. Wildlife methodology, several paragraphs on page

Focused desert tortoise surveys were conducted during spring 2011 within the proposed solar facility site (both parcels) and spring 2012 on gen-tie line alignment Alternative E. The surveys were conducted in accordance with the current USFWS survey protocol "Preparing for Any Action That May Occur within the Range of the Mojave Desert Tortoise" (USFWS 2010a).

A Mojave fringe-toed lizard habitat evaluation was conducted within the proposed solar facility site boundaries and development footprint on February 25, March 5, and March 12, 2011, and on gen-tie line alignment Alternative E on June 25, 2012 to identify potential habitat, individuals, and/or sign that would indicate potential occupancy of the project site by this species.

Focused breeding season surveys for Gila woodpeckers were conducted throughout potential habitat (desert dry wash woodland) on the proposed solar facility site during spring 2012 by AMEC biologists (Appendix C).

The descriptions of regional golden eagle habitat, nest sites, ~~and~~ territory occupancy, and winter occurrence in this document are based on the data provided in the DSSF EIS and supporting documents (BLM 2011b), winter 2011-12 field surveys by Bloom Biological Inc. (Appendix C.7), and BLM records of 2012 golden eagle activity. The~~at~~ DSS FEIS ~~document~~ addressed active and inactive golden eagle nests within a 10-mile radius of the DSSF project and the Red Bluff Substation. This 10-mile radius fully encompasses all alternatives of the DHSP project and a corresponding 10-mile radius. The 2012 golden eagle data were provided by Dr. L.F. LaPre, Wildlife Biologist, BLM California Desert District.

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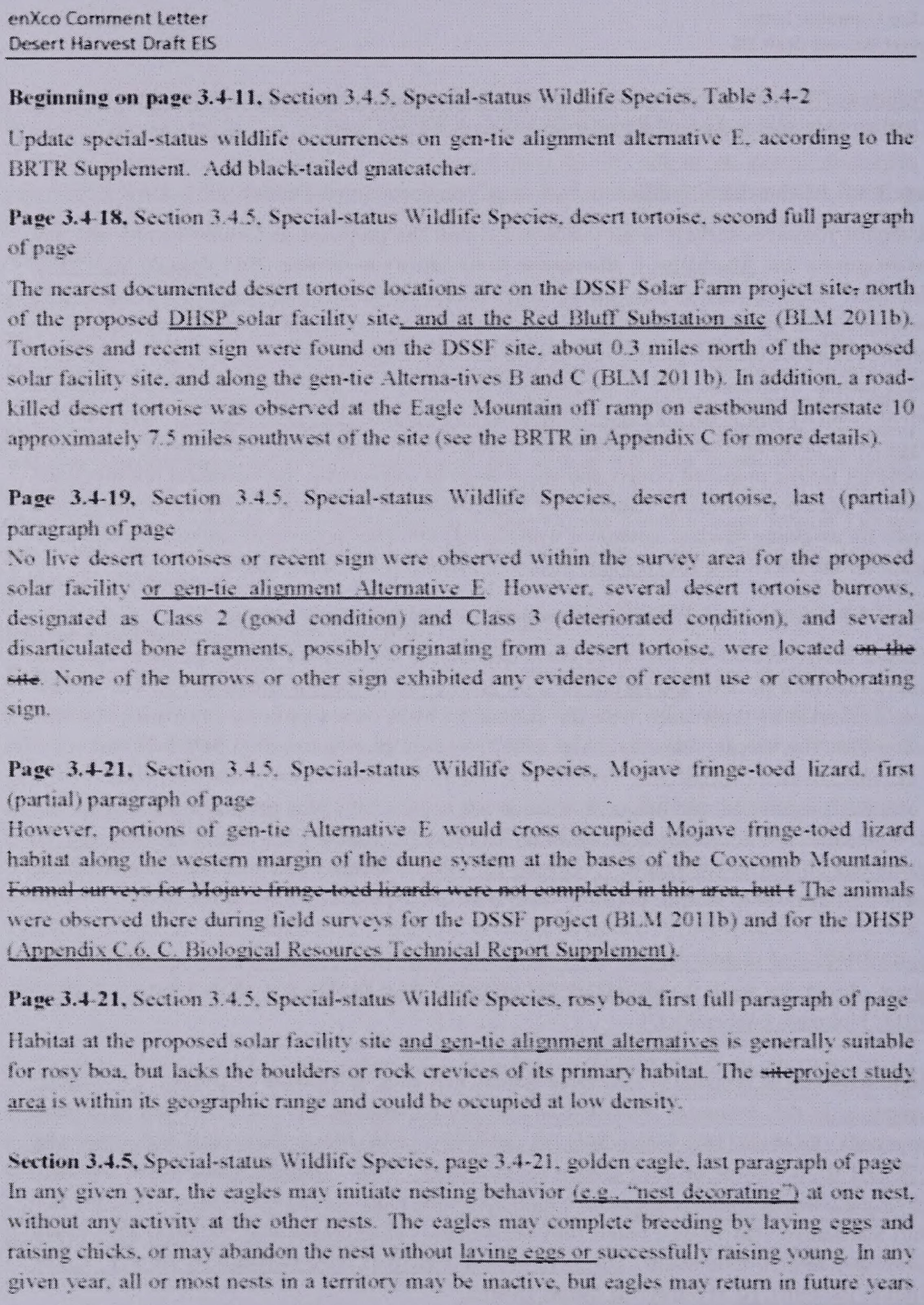
ENXCO



Beginning on page 3.4-11. Section 3.4.5, Special-status Wildlife Species, Table 3.4-2

Update special-status wildlife occurrences on gen-tie alignment alternative E, according to the BRTR Supplement. Add black-tailed gnatcatcher.

F001-45

Page 3.4-18. Section 3.4.5, Special-status Wildlife Species, desert tortoise, second full paragraph of page

The nearest documented desert tortoise locations are on the DSSF Solar Farm project site~~,~~ north of the proposed DHSP solar facility site, and at the Red Bluff Substation site (BLM 2011b). Tortoises and recent sign were found on the DSSF site, about 0.3 miles north of the proposed solar facility site, and along the gen-tie Alterna-tives B and C (BLM 2011b). In addition, a road-killed desert tortoise was observed at the Eagle Mountain off ramp on eastbound Interstate 10 approximately 7.5 miles southwest of the site (see the BRTR in Appendix C for more details).

F001-46

Page 3.4-19. Section 3.4.5, Special-status Wildlife Species, desert tortoise, last (partial) paragraph of page

No live desert tortoises or recent sign were observed within the survey area for the proposed solar facility or gen-tie alignment Alternative E. However, several desert tortoise burrows, designated as Class 2 (good condition) and Class 3 (deteriorated condition), and several disarticulated bone fragments, possibly originating from a desert tortoise, were located ~~on the site~~. None of the burrows or other sign exhibited any evidence of recent use or corroborating sign.

F001-47

Page 3.4-21. Section 3.4.5, Special-status Wildlife Species, Mojave fringe-toed lizard, first (partial) paragraph of page

However, portions of gen-tie Alternative E would cross occupied Mojave fringe-toed lizard habitat along the western margin of the dune system at the bases of the Coxcomb Mountains. ~~Formal surveys for Mojave fringe-toed lizards were not completed in this area, but t~~ The animals were observed there during field surveys for the DSSF project (BLM 2011b) and for the DHSP (Appendix C.6, C. Biological Resources Technical Report Supplement).

F001-48

Page 3.4-21. Section 3.4.5, Special-status Wildlife Species, rosy boa, first full paragraph of page

Habitat at the proposed solar facility site and gen-tie alignment alternatives is generally suitable for rosy boa, but lacks the boulders or rock crevices of its primary habitat. The ~~site~~project study area is within its geographic range and could be occupied at low density.

F001-49

Section 3.4.5. Special-status Wildlife Species, page 3.4-21, golden eagle, last paragraph of page

In any given year, the eagles may initiate nesting behavior (e.g., "nest decorating") at one nest, without any activity at the other nests. The eagles may complete breeding by laying eggs and raising chicks, or may abandon the nest without laying eggs or successfully raising young. In any given year, all or most nests in a territory may be inactive, but eagles may return in future years

F001-50

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ENXCO

F001-50 cont.

to nest at previously inactive sites. Eight inactive golden eagle nests ~~have been~~ were documented in the DSSF EIS and its appendices within a 10-mile radius of the DHSP site, to the northwest, northeast, and south of the proposed solar facility site. The nearest inactive nest was about 5 miles to the northeast. Additionally, one active but non-reproductive nest was reported in the Coxcomb Mountains, about 5 miles northeast of the site (BLM 2011b). Updated BLM records (L.F. LaPre, personal communication) indicate a total of 10 nests within a 10-mile radius of the DHSP solar facility site. There was early breeding season activity at one of these nests in 2012 but there was no reproduction and no golden activity there by late May, 2012.

F001-51

Page 3.4-22. Section 3.4.5, Special-status Wildlife Species, burrowing owl, last paragraph of page, continuing to 3.4-23

Concurrent with the desert tortoise surveys for the solar facility site and gen-tie alignment Alternative E (conducted during spring 2010 on the larger northwestern parcel, ~~and~~ spring 2011 on the small parcel, and spring 2012 on the gen-tie alignment), biologists examined all potentially suitable burrows for sign of burrowing owls. These field surveys correspond to 100 percent coverage Phase II surveys for burrowing owls, according to the CBOC protocol (CBOC 1993). No burrowing owls or their sign were observed during these spring season surveys or during the winter and breeding season avian point count surveys. However, two incidental burrowing owl observations were recorded during streambed delineation field work on the proposed solar facility site. In one observation, a burrowing owl was briefly seen perching and flying, but was not at a burrow. The other observation was a burrowing owl seen in the mouth of an inactive desert kit fox burrow; no burrowing owl sign (e.g., whitewash, prey remains, or owl pellets) was found on the proposed solar facility site or on gen-tie alignment Alternative E. Based on these field surveys and incidental observations, it was determined that the ~~solar facility site has~~ project study area provides suitable habitat for burrowing owls during winter or breeding seasons. Breeding burrowing owls were not present ~~on the site~~ during the desert tortoise surveys, but they could nest in the project study area ~~on the site~~ in future years. During fall and winter, the proposed solar site and the proposed and alternative gen-tie alignments appear to serve as low-density seasonal burrowing owl habitat.

F001-52

Page 3.4-24. Section 3.4.5, Special-status Wildlife Species, Gila woodpecker, second paragraph of page

A Gila woodpecker was observed in the southeastern part of the project site in December 2010, but was not seen again during the BLM protocol winter season or breeding season avian point counts. In spring 2012, all desert dry wash woodland habitat was surveyed to determine presence or absence of breeding Gila woodpeckers, but no further Gila woodpecker observations were recorded (AMEC in prep [enXco will submit final report as soon as available]). Although no Gila woodpecker observations were made in the project study area during BLM protocol point counts or during focused breeding season surveys, there is at least a low probability that they may nest in desert wash woodland habitat on or near the solar facility site or gen-tie alternatives.

COMMENT SET F001, CONT.
ENXCO

F001-53

Page 3.4-25. Section 3.4.5, Special-status Wildlife Species, upland perching birds, lower part of page

Several special-status upland perching bird species are present or have the potential to occur in the project study area. These include loggerhead shrike, Le Conte's thrasher, Vaux's swift, black-tailed gnatcatcher, and vermillion flycatcher. Of these, Vaux's swift, black-tailed gnatcatcher, and loggerhead shrike were recorded in the project study area during surveys. A Vaux's swift was observed over the site during migration season. This species occurs in the area only during migration; it nests well to the north. Loggerhead shrikes were observed on the solar facility site routinely throughout the winter and breeding season avian point count surveys and on gen-tie alignment Alternative E during spring 2012. Black-tailed gnatcatcher was observed on gen-tie alignment Alternative E during April 2012. Le Conte's thrasher has not been reported on site, but habitat is suitable and there are records for this species 6.5 miles south of the proposed solar facility site near the gen-tie alternatives. Vermillion flycatchers have not been reported on site, but nest in similar habitat to the south and could nest in Blue Palo Verde–Ironwood Woodlands (Desert Dry Wash Woodland) in the project study area in future years. The Eagle Mountains scrub jay population resides year round in pinyon woodlands in the Eagle Mountains to the west and northwest of the proposed solar facility site. It is disjunct from other scrub jay populations, and is on CDFG's "watch list" but has no other special conservation status. A scrub jay was observed on the project site in October 2011; presumably, it was wandering or dispersing from habitat in the Eagle Mountains. However, no suitable scrub jay habitat is found in the project study area.

F001-54

Page 3.4-26. Section 3.4.5, Special-status Wildlife Species, Coachella Valley round-tailed ground squirrel, lower part of page

Gen-tie Alternative E crosses suitable habitat over a portion of its length, but was not observed on the alignment during field surveys in spring 2012. Based on the foregoing, Palm Springs round-tailed ground squirrel may occur in low numbers on the solar facility site or gen-tie alternatives, but primary habitat would only be intersected by Alternative E over ~~a~~ the portion of its length crossing aeolian sands.

F001-55

Page 3.4-27. Section 3.4.5, Special-status Wildlife Species, desert kit fox, first full paragraph of page

Numerous desert kit fox burrows were recorded in the proposed solar facility site and on gen-tie alignment Alternative E, and suitable habitat occurs through-out the project study area, including all the gen-tie alternative alignments.

F001-56

Section 3.4.5. Special-status Wildlife Species, page 3.4-30, wildlife movement, last sentence, first full paragraph of page, regarding BLM connectivity research report:
"The final report will be made available to the public in spring 2012." enXco recommends updating the publication date of this report, and providing a citation if available.

COMMENT SET F001, CONT.
ENXCO

3.6 Cultural Resources

F001-57

General Comment: This section and Section 4.6 state throughout that at the time of the circulation of the DEIS, multiple tasks needed to inventory cultural resources, evaluate their status as historic properties, and assess the potential effects of the proposed Project were incomplete, but would be finished prior to release of the FEIS. Those statements suggest that large portions of the project had not been investigated and that, after circulation of the DEIS, the potential to discover significant historic properties that would be affected adversely was high. But, in fact, at the time of the DEIS circulation, 100 percent of the solar fields (1,208 acres) had been surveyed intensively, revealing only one archaeological site. Only small portions of the Gen-tie Alternative corridors on MWD and private land remained to be surveyed because of denied access; the corridors crossing BLM and state-owned land had been surveyed. Only 218 acres of MWD land remained to be surveyed after circulation of the DEIS, while 98.3 acres (only 4 % of the project APE) of privately owned property are still not accessible.

More overstated in the DEIS than the proportion of the project footprint that remained to be surveyed, is the suggestion that very significant cultural resources could be found during the subsequent archaeological surveys. Surveys that occurred after circulation of the DEIS did indeed record three additional historic-era archaeological sites in gen-tie alternatives. Importantly, though, these site types lack significance and are similar to many sites that have been determined by the BLM to be not eligible for the National Register of Historic Places (NRHP) for the Desert Sunlight Solar Farm project. The total of newly discovered resources has increased from 21 to 25, but 16 of those are isolated artifacts, not considered eligible for the NRHP. As well, geomorphological research conducted after circulation of the DEIS suggests that the project area may not be as universally sensitive for undiscovered buried archaeological sites as was stated in the DEIS. Further, the research shows that the potential for significant ancient remains, such as those found recently adjacent to Ford Dry Lake is very low, contrary to statements in the DEIS.

This section should be revised, throughout, to update all information and to incorporate data presented in two reports provided to the BLM in June, 2012. A BLM Class III Archaeological Resources Inventory for the Desert Harvest Solar Farm Project (Chambers Group and Applied EarthWorks, 2012) and Assessment of Indirect and Cumulative Effects to Historic Properties (Smallwood et. al. 2012) provide complete inventories and evaluations of historical and prehistoric archaeological resources within areas of direct effect and assessment of the indirect effects of the proposed Project on historic properties (National Register Archaeological Districts and built environment properties) within a five-mile radius, respectively. New surveys have confirmed a paucity of archaeological resources within the Project's areas of direct effect. Further, the Class III inventory report includes a geomorphological study that refines the analysis regarding the potential for discovering significant and intact buried archaeological sites during construction.

COMMENT SET F001, CONT.
ENXCO

General Comment: Information should be added indicating that the BLM has initiated Section 106 consultation with Native Americans regarding potential effects of the Project on historic properties. Progress and results of that consultation should be incorporated into this chapter. F001-58

Section 3.6.1, p. 3.6-2, paragraph 4: This paragraph discussing requirements of treatment of human remains under the NAGPRA does not clearly state that no human remains have been discovered in the Project area, nor have any prehistoric sites of the type that would contain human remains been identified. F001-59

Section 3.6.1, p. 3.6-4, paragraph 3: Under provisions of Public Resources Code Section 5097.98 only one Most Likely Descendant (MLD) would be identified by the Native American Heritage Commission. Again, it should be stated there has been no discovery of human remains in the Project area. F001-60

Section 3.6.2, p. 3.6-6: This section of the DEIS should be updated to reflect the geomorphology study carried out specifically for the Desert Harvest Project and reported in A BLM Class III Archaeological Resources Inventory for the Desert Harvest Solar Farm Project (Chambers Group and Applied EarthWorks, 2012). The preliminary assessment in the DEIS of geomorphology and the potential for subsurface archaeological resources was based on a geoarchaeological study conducted for the Desert Sunlight Project (Chandler et al. 2010). The DEIS suggests that, because the sediments in the region were deposited during the Holocene, the period of human occupancy in the Chuckwalla Valley, it is likely that significant archaeological deposits are buried within those sediments. This is incorrect. This DEIS section further draws a false comparison between the potential for buried sites in the Desert Harvest/Desert Sunlight area and areas to the east where multiple buried sites have been found during construction of the Genesis Solar Energy Project. F001-61

When developing sensitivity models to predict the presence of significant and intact buried archaeological sites, a number of factors need to be considered. These include the geomorphological factors of age of sediments and their energy of deposition. It is extremely unlikely that archaeological deposits would be buried by sediments that were deposited prior to the Holocene. Further, archaeological deposits within fluvial settings, such as the Desert Harvest Project area, are unlikely to retain contextual integrity, an important factor in determining NRHP eligibility of archaeological sites. Another factor in modeling sensitivity for buried sites is the suitability and attractiveness of a particular locality for habitation or intensive use by prehistoric populations. Areas surrounding, but outside the Project vicinity were more attractive and suitable because of the presence of springs and toolstone, especially to the south, and lakes (the now dry lakebeds of Ford and Palen lakes) to the east. Neither water (which also would have sustained plants and animals for food) nor high quality toolstone would have been available in the Project

COMMENT SET F001, CONT.
ENXCO

area, thus limiting the attractiveness of the area for intensive use. Multiple habitation, rock art, and quarry sites in the Chuckwalla Mountains and buried sites along the margins of Ford Dry Lake are testimony to this distribution of necessary and sought after resources. While some prehistoric material may occur in the Holocene sediments within the Desert Harvest Project area, environmental and geomorphic conditions suggest that they would not represent sustained prehistoric use of the area, and that prehistoric deposits would retain only low to moderate integrity if they are present at all. F001-61 cont.

Section 3.6.2, p. 3.6-28, Class I Inventory: In order to characterize the nature of known archaeological resources in the mile surrounding the Project, this section provides little detail of the types and age of the 352 cultural resources that are reported. The majority of these are from the historic era and the vast majority are isolated artifacts, not archaeological sites. Isolated artifacts rarely qualify for management consideration under Section 106 because of a lack of context and no significant data potential. F001-62

Section 3.6.2, p. 3.6-28 and 3.6-29, BLM Class III Survey: The total area of the APE is 2520.4 acres, 2422.1 acres (96 %) of which has been surveyed intensively. All of the two solar fields and all of Gen-tie Alternatives B/C and E have been surveyed completely. Only 98.3 acres of the Gen-tie Alternative D have not been surveyed because access to 15 privately owned parcels on that route has been denied. F001-63

The total of newly discovered resources has increased from 21 to 25, but 16 of those are isolated artifacts, not considered eligible for the National Register of Historic Places (NRHP).

The indirect effects inventory has been completed and a report, Assessment of Indirect and Cumulative Effects to Historic Properties (Smallwood et. al. 2012) submitted to BLM.

Section 3.6.2, p. 3.6-29, Resources Identified within DHSP Components: Please add a statement that archaeological sites themselves found not eligible for the NRHP do not qualify for further management consideration under Section 106 is appropriate. F001-64

In addition, the North Chuckwalla Mountains Quarry District is listed on the NRHP, under Criterion D for its research value. Research values are not NRHP qualities that are subject to indirect visual, auditory, or atmospheric effects. Therefore, the Project would have no adverse effect to that resource.

Section 3.6.2, p. 3.6-29, Resources Associated with all Project Components—Historic Districts: The DEIS states that all project components are within the boundaries of two potential historic districts currently being studied. Neither the proposed Prehistoric Trails Network Cultural Landscape (PTNCL) nor the Desert Training Center California-Arizona Maneuver Area (DTC/C-AMA), proposed as the Desert Training Center Cultural Landscape (DTCCL) has been found eligible for the NRHP. Unless or until there is a formal eligibility determination for these F001-65

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ENXCO

two proposed districts, they have no legal standing. Importantly, a determination will be required to establish boundaries of the two landscapes and to determine which sites/components of each actually contribute to their eligibility. In the meantime, DTC-C/AMA resources must be evaluated in the context of an earlier evaluation of a discontiguous district (Bischoff 2000). Prehistoric sites must be evaluated individually, not as contributing elements of a proposed district. F001-65 co

Section 3.6.2, p. 3.6-29 and 3.6-30, Solar Farm Site: This section should be updated to indicate that none of the archaeological resources in the 1208 acre solar farm, including the "pot drop" appear to be eligible for the NRHP. It should also state that the entire solar farm has been surveyed intensively. F001-66

Section 3.6.2, p. 3.6-30, Transmission Line Corridors: The summary of the number of sites and their NRHP eligibility in this section and Table 3.6-1 should be updated using revised data from the Class III archaeological inventory report (Chambers Group and Applied EarthWorks 2012). Because of previous inaccuracies in mapping and analysis, the DEIS overstates the number of cultural resources within each alternative corridor. It also understates the portion of each alternative that has been intensively surveyed. F001-67

Alternative B/C: This corridor includes only 18 archaeological sites. NRHP determinations made for the Desert Sunlight Project include one site that is eligible, eleven that are not eligible, and six that were not evaluated because they could be avoided and protected during construction. This alternative was completely surveyed.

Alternative D: This corridor includes eight archaeological sites, including three in the section of Alternative D that overlaps Alternative B/C. One site has been determined eligible, one has been determined not eligible, one has been recommended ineligible, two were not evaluated for Desert Sunlight because they could be avoided and protected, and the remaining three have not been evaluated. Only 98.3 acres of the Gen-tie Alternative D have not been surveyed because access to 15 privately owned parcels on that route has been denied. F001-68

Alternative E: This corridor includes seven archaeological sites and has been completely surveyed. Six of the sites have been recommended not eligible for the NRHP, while one has not been evaluated. F001-69

Table 3.6-1: The location of the final two entries should be clarified because they are not within the area of direct effects and the Red Bluff Substation is not being evaluated in this DEIS. F001-70

Section 3.20 Water Resources

Pages 3.20-6 and 3.20-7. The second paragraph under the first bullet point on page 3.20-6 and the "Senate Bill 267" paragraph of page 3.20-7 assert that the proposed project is not subject to SB 267's wind and photovoltaic solar exemption because the proposed project will require more F001-71

COMMENT SET F001, CONT.
ENXCO

F001-71 cont.

than 75 acre-feet of water per year during its 24-month construction period. The text of SB 267 provides that SB 610 does not apply to a wind or solar PV facility "if the facility would demand no more than 75 acre-feet of water annually". enXco construes the word "annually" to mean annual water demand averaged over the life of the project. Because the Desert Harvest project's average annual water consumption is less than 75 afy over the 30-50 years of the project's life (500.51 afy in 2013 and 2014; 39.02 afy each year thereafter), enXco is of the opinion that the project did require a water supply assessment, although it respects the discretion of Riverside County to require one as a cooperating agency under NEPA and as lead agency under CEQA. This interpretation is consistent with SB 610's definition of projects based on operational characteristics (e.g., dwelling units, square feet) rather than their one-time construction water demand or actual water use in a single year.

F001-72

Page 3.20-16. To reflect enXco's comments on pages 4.20-7 and 4.20-8, below enXco recommends revising the "Groundwater Level Trends" paragraph of the page as follows:

Groundwater Level Trends

Groundwater levels in the Hayfield Planning Area range from the ground surface to 400 feet below ground surface (bgs) (Colorado River Basin RWQCB 2006b). Specific to the CVGB, data show stable groundwater levels in the basin in 1963, and groundwater contours in 1979 indicate that groundwater moves from the north and west toward the gap between the Mule and McCoy Mountains at the southeastern end of the valley (DWR 2004a). The direction of groundwater movement is not anticipated to have changed since the aforementioned 1979 data; however, groundwater level trends may have changed substantially since 1963, due to development of the area and expanded groundwater uses. For example, data from wells within the Desert Center area show a period of water level decline in the mid-1980s during periods of expanded agricultural operations when combined pumping exceeded 20,000 afy. Agriculture operations were reduced during the late 1980s and more recently (2000) water levels in the Desert Center have been measured at levels similar to the 1960s (AECOM, 2011). AECOM, 2011. Accounting Surface Technical Memorandum, Appendix O to the Desert Sunlight Solar Farm EIS is attached.

F001-73

Page 3.20-23. enXco disagrees with and requests deletion of the opinion expressed under "Colorado River Accounting Surface" that "Due to the hydrologic connection between the CVGB and the Colorado River, all groundwater production at the DHSP site could be considered Colorado River water." Deletion of this sentence is appropriate because it ignores the Colorado River Accounting Surface Standard developed by USGS.

F001-74

Section 4.1 Environmental Consequences

General. Please include a general provision specifying that the project owner shall be copied on all third party (e.g., biological monitor) agency reporting requirements established by the mitigation measures of the DEIS.

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ENXCO

4.2 Air Resources

F001-75

Page 4.2-26. The "Past, Present, and Reasonably Foreseeable Future Projects" section lists "projects under development". However, the listing should distinguish between cumulative projects that are actually approved and under construction and cumulative projects that are undergoing environmental impact review.

4.3 Biological Resources - Vegetation

F001-76

Page 4.3-4, 4.3.7 Alternative 4, Construction, first paragraph of section

Most construction impacts to vegetation resources would occur during Phases 2 and 3 (September 2013 through May 2015)~~1 (September 2012 to July 2013)~~, which would include site fencing, installation of temporary power, site grading and preparation~~over an 800-acre area~~, and other facilities.

F001-77

Page 4.3-7. Please revise the last complete paragraph on the page to reflect USACE's 29 May 2012 Jurisdictional Determination as follows.

The USACE ~~and Colorado River Basin Region (Water Quality Control Board Region 7) have not~~ has issued its jurisdictional determination~~s.~~, concluding that no waters of the United States on the proposed solar facility site (Appendix C, [USACE May 29 2012])~~at the time of publication of this Draft EIS~~. The Colorado River Basin Regional Water Quality Control Board (Region 7) has indicated that 401 Water Quality Certification is not necessary (Appendix C, [Jay Mirpour email June 26 2012]).

F001-78

Page 4.3-12. Please insert the following at the end of the first paragraph of MM VEG-1: "Minimum qualifications shall be as follows:"

F001-79

Page 4.3-14 and 15, 4.3.7 Alternative 4, MM VEG-2, first paragraph of the measure

... The Designated Biologist or a Biological Monitor will be present during all ground-disturbing activities and, to the extent practicable, will actively or passively (i.e., without handling the animals) relocate wildlife out of harm's way. Relocated animals will be moved to a suitable location ~~within 500 meters of~~as near as feasible to the animal's original location, on BLM lands outside of the project footprint. Desert tortoises will only be handled according to provisions approved by USFWS and CDFG, to be specified in the Desert Tortoise Translocation Plan (see MM WIL-2).

F001-80

Page 4.3-21. MM VEG-6, Table 4.3-3 and the preceding text. Please reconcile acreage discrepancies between the text and table.

F001-81

Page 4.3-23. MM VEG-6, selection criterion i. iii.

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The primary focus area for acquiring parcels to maintain/improve connectivity will be along the I-10 corridor between Desert Center and Cactus City with a priority on parcels that connect conserved lands on either side of the I-10 through large culverts or bridges; the habitat compensation ratio for mitigation lands along the I-10 corridor will be 1:1 for each acre of total long-term and permanent disturbance. If acquisition of sufficient acreage within the I-10 corridor is not feasible, then the Project Owner will coordinate with Resource Agencies to identify other suitable lands to compensate for the project's impacts to desert tortoise habitat connectivity.

F001-81 cont.

Page 4.3-29. Please delete a typographical error from paragraph "h" of the page, as follows: "… or long-term maintenance and management of the compensation lands ~~by funding~~, or any combination of these requirements, by providing funds…"

F001-82

Page 4.3-30. Please replace references to "SB 34" in paragraph "j" of MM VEG-6 with "AB 13". AB 13 superseded SB 34 on 29 August 2011.

F001-83

Page 4.3-30. Emory's crucifixion thorn. Alternatives 6 and 7 both would avoid impacts to the Emory's crucifixion thorn plants located in the southern parcel (by avoiding the parcel altogether) and by removing a 9-acre rectangle near the southern boundary of the northern parcel. enXco does not believe that the crucifixion thorn occurrences or the project's anticipated impacts to these plants are sufficient grounds for either of these project area reductions. Emory's crucifixion thorn is not listed as threatened or endangered under state or federal law, it is not managed by BLM as a "sensitive species," and the DEIS concludes that loss of all Emory's crucifixion thorn in the Alternative 4 ROW configuration could be appropriately mitigated and would be less than significant. enXco believes that the BLM can achieve the best balance of renewable energy production and resource protection through adoption of the ROW configuration described in Alternative 4, but with the use of the high-profile solar panels analyzed in Alternative 7. In the case of Emory's crucifixion thorn, actual impacts of Alternative 4 would be less than described in the DEIS, and the minor benefits of Alternatives 6 or 7 are not warranted.

F001-84

In contrast with Alternatives 6 and 7, Alternative 4 would include the southern parcel and the 9-acre exclusion area. Section 4.3.7 of the DEIS describes the impacts of Alternative 4 to Emory's crucifixion thorn and recommends mitigation for those impacts, as follows: "Implementation of Mitigation Measure MM VEG-7 (Mitigate Direct Impacts to Special-Status Plants) would reduce project impacts to Emory's crucifixion thorn by requiring the project owner to either (1) salvage individual plants from the site prior to construction; (2) introduce greenhouse-raised plants into suitable off-site habitat; or (3) to provide compensation lands with extant Emory's crucifixion thorn," and concludes that "MM VEG-7, in combination, with other measures, is expected to appropriately minimize or mitigate the majority of the project's adverse impacts to special-status plants, though some residual impacts [i.e., the net loss of special status plants, p. 4.3-37] would remain." The DEIS also concludes that "these impacts to vegetation resources would be mitigated to less than significant levels under CEQA" (page 4.3-67). enXco agrees with the

COMMENT SET F001, CONT.
ENXCO

F001-84 co

DEIS that the impacts of Alternative 4 to Emory's crucifixion thorn would be adverse but would be appropriately mitigated and would be less than significant.

The actual impacts of the Alternative 4 ROW configuration to Emory's crucifixion thorn would be considerably less than described in the DEIS. Many of the crucifixion thorn locations in the southern parcel are within a 400-foot transmission line corridor crossing the parcel from northwest to southeast. With the exception of an access road across the corridor, enXco does not propose to construct project facilities within that corridor (see DEIS Figures 2-3 and 3.3-1a). Thus, Alternative 4 would avoid the majority of crucifixion thorn locations. If project design cannot effectively avoid 75 percent of the plants, then enXco is prepared to implement one or more of the other strategies recommended in the DEIS (i.e., off-site compensation, salvage, or horticultural propagation / off-site introduction).

F001-85

Section 2.7 of the DEIS states that the 9-acre removal area "…contains a sensitive plant species, crucifixion thorn…" but does not describe the BLM's rationale for delineating the specific avoidance area described in Section 2.7 and shown on Figure 2-10. In MM VEG-7 of the DEIS, a 250-foot buffer for Emory's crucifixion thorn is recommended as a mitigation option, but not as a requirement. The 9-acre exclusion area in Alternatives 6 and 7does not correspond to the 250-foot buffer described in VEG-7. A circle of radius 250 feet covers an area of 4.5 acres (half the size of the exclusion area in Alternatives 6 and 7). Further, a 250-foot radius buffer area around the actual Emory's crucifixion thorn locations in the northern parcel would affect only about 3 acres within the ROW boundaries, because a part of the circle would fall within MWD lands outside the ROW.

enXco believes that a smaller buffer area may be suitable to protect this species in this environment, should avoidance be employed. The purpose of a buffer area surrounding special-status plants such as Emory's crucifixion thorn is to avoid or minimize adverse off-site or indirect "edge effects" from surrounding land uses, such as vehicle use, foot traffic, increased recreation uses, pets, invasive or weedy species, herbicide overspray, or altered surface hydrology. These effects are difficult to quantify for any land use, but they are most characteristic of residential and commercial developments where adjacent natural areas are subject to substantially increased edge effects of surrounding development. In the case of the Desert Harvest project, these edge effects would be controlled or prevented by enXco, subject to BLM compliance monitoring. For example, enXco will control all vehicle access within the project area; on-site personnel with access to sensitive areas will be limited; no new recreational visitors or opportunities will be present; pets will be prohibited; weeds and herbicide use will be controlled through the IWMP; surface hydrology will be protected through BMPs; and the project boundary will be fenced. All of these protections are either components of the project design or are recommended in DEIS mitigation measures.

Because these measures impose greater control over use of the private energy facility than over a commercial or residential development, the project's edge effects to surrounding habitat are

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minimized. enXco recommends a reduction of buffer areas for Emory's crucifixion to 100 feet because of these reduced edge effects. F001-85 cont.

F001-86

Based on this discussion, enXco recommends the following revisions:

Page 4.3-30. 4.3.7 Alternative 4, MM VEG-7

The project Owner will mitigate impacts to Emory's crucifixion thorn (CRPR 2) on the solar generator site and direct impacts to any other CRPR 1 or 2 ranked plants that may be impacted by gen-tie line construction, including impacts to Harwood's woolly-star (CRPR 1) on ~~plants that may be discovered during spring 2012 field surveys of~~ gen-tie Alternative E, through one or a combination of the following strategies. ~~No CRPR Rank 1 plants have been reported from the site or are expected to occur (Section 3.3) but if a CRPR Rank 1 species is located during future field work, the Designated Biologist will coordinate with BLM botanists to determine appropriate mitigation, commensurate with the measures described below.~~

> **1. Avoidance.** Project design will avoid at minimum 75 percent of the Emory's crucifixion thorn, Harwood's woollystar, and other CRPR 1 or 2 ranked plants occurrences within the project boundaries or other work areas, including the gen-tie line, and will provide a minimum 100 ~~250~~-foot buffer area surrounding each avoided occurrence, where no project activities will take place.
>
> **2. Off-site compensation.** The project Owner will provide compensation lands consisting of occupied Emory's crucifixion thorn, Harwood's woollystar, or other CRPR 1 or 2 ranked plants ....

Page 4.3-32. BMP 3 of the page should be revised to state that the project proponent "shall prevent" rather than "will not allow" water containing pollutants from entering ephemeral drainages or being placed in high storm flow locations, in the off-chance spills occur even after good faith best efforts. F001-87

Page 4.3-35. MM VEG-10, second numbered paragraph of MM F001-88

> 2. A qualified botanist or plant physiologist will develop a sampling protocol to be carried out in desert dry wash woodland at each sampling zone (above) and the control site to monitor stress and mortality of target plants once operations begin. The protocol will include a measure of pre-dawn water potential or other appropriate indicator of water stress, as measured by standard plant physiology techniques.

Page 4.3-36. 4.3.7 Alternative 4, MM VEG-10, first full paragraph of page F001-89

If results of the groundwater monitoring program under MM WAT-3 indicate that the project pumping has resulted in water level decline of 1 foot or more below the baseline trend, and

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ENXCO

F001-89

vegetation monitoring for plant stress, mortality, and water potential have documented one or more of the sampling sites for the ~~four~~ two groundwater-dependent plant species…

F001-90

Page 4.3-36, 4.3.7 Alternative 4, Residual Impacts and Unavoidable Adverse Eff**ects** (note that the recommended replacement text is from 4.3-63 of the DEIS and it is consistent with the statement on page 4.3-67, "With implementation of Mitigation Measures MM VEG-1 through MM VEG-10, these impacts to vegetation resources would be mitigated to less than significant levels under CEQA."

… This measure, while compensating for impacts to vegetation resources, would not prevent those impacts from occurring. ~~Even with off-site compensation at recommended ratios, there would be a~~ The net loss of ~~the~~ native vegetation and related resources (including habitat and streambed values) ~~of 1,208 acres.~~ would be reduced over time through habitat compensation, which is expected to prevent future losses of habitat by placing a permanent conservation easement and deed restrictions on private lands that could otherwise be converted for urban, agricultural, or energy development.

F001-91

Page 4.3-41. The second sentence of the first paragraph of Section 4.3.12 states that analysis for the EIS commenced in November 2011. This is incorrect. As stated elsewhere in the EIS, analysis commenced upon publication of the NOI on 15 September 2011.

F001-92

Page 4.3-45. Alternative B Residual Impacts and Unavoidable Adverse Effects

This measure, while compensating for impacts to vegetation resources, would not prevent those impacts from occurring. With the implementation of Mitigation Measures MM VEG-1 through MM VEG-9 (excluding MM VEG-7) residual impacts to vegetation resources would be (1) the net loss of vegetation and habitat on the alignment (2) the direct effects of dust and other disturbances to adjacent off-site habitat during construction, operation, and decommissioning of the gen-tie line; and (3) the net loss of state-jurisdictional streambeds on the alignment. These impacts are described above, under direct impacts of project construction. The net loss of the native vegetation and related resources (including habitat and streambed values) would be reduced over time through habitat compensation, which is expected to prevent future losses of habitat by placing a permanent conservation easement and deed restrictions on private lands that could otherwise be converted for urban, agricultural, or energy development.

F001-93

Page 4.3-47. Alternative C Residual Impacts and Unavoidable Adverse Effects.

With the implementation of Mitigation Measures MM VEG-1 through MM VEG-9 (excluding MM VEG-7), residual impacts to vegetation resources would be (1) the net loss of vegetation and habitat on the alignment; (2) the direct effects of dust and other disturbances to adjacent off-site habitat during construction, operation, and decommissioning of the gen-tie line; and (3) the net loss of state-jurisdictional streambeds on the alignment. These impacts are described above, under direct impacts of project construction. The net loss of the native vegetation and related

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F001-93 cont.

resources (including habitat and streambed values) would be reduced over time through habitat compensation, which is expected to prevent future losses of habitat by placing a permanent conservation easement and deed restrictions on private lands that could otherwise be converted for urban, agricultural, or energy development.

F001-94

Page 4.3-51. Alternative D Residual Impacts and Unavoidable Adverse Effects

With the implementation of Mitigation Measures MM VEG-1 through MM VEG-9, residual impacts to vegetation resources would be (1) the net loss of vegetation and habitat on the alignment; (2) the direct effects of dust and other disturbances to adjacent off-site habitat during construction, operation, and decommissioning of the gen-tie line; (3) the net loss of special-status plant occurrences on the alignment; and (4) the net loss of state-jurisdictional streambeds on the alignment. These impacts are described above, under direct impacts of construction. The net loss of the native vegetation and related resources (including habitat and streambed values) would be reduced over time through habitat compensation, which is expected to prevent future losses of habitat by placing a permanent conservation easement and deed restrictions on private lands that could otherwise be converted for urban, agricultural, or energy development.

F001-95

Page 4.3-51. Please update Section 4.3.15 to reflect the results of enXco's 2012 rare plant surveys for Alternative E.

Page 4.3-52. 4.3.15 Alternative E, Special-status plants

One Emory's crucifixion thorn was located near the alignment and 65 desert unicorn-plant occurrences were documented on or near the alignment of gen-tie Alternative E during fall field surveys for the DHSP (Section 3.3). Due to the natural history of desert unicorn-plant (perennial herb; sprouts above-ground every few years in response to warm season rains), it is likely that additional, undocumented locations exist along the alignment. Spring surveys of the alignment ~~will be~~were conducted during spring 2012~~, and the results will be incorporated into the Final EIS~~. ~~Four~~ Two additional special-status plants were documented ~~have the potential to occur~~ on the Alternative E alignment: ~~Harwood's milk-vetch, Abrams's spurge,~~ Harwood's woollystar and ribbed cryptantha~~, and Jackass clover~~ (see Section 3.3).

Depending on the placement of poles and other work sites, construction of Alternative E could remove known special-status plant occurrences, or occurrences not yet documented. Harwood's woollystar is ranked as CRPR 1B; ~~crucifixion thorn, Harwood's milk-vetch, jackass spurge, and Abrams's spurge are ranked as CRPR 2;~~ ribbed cryptantha and desert unicorn-plant ~~is~~ are ranked as CRPR 4. Of these species, only Harwood's woollystar is a BLM Sensitive Species (see Section 3.3). Impacts to ~~any of these species, excluding desert unicorn-plant~~ Harwood's woollystar would either be avoided by placement of project components, or would be mitigated through implementation of ~~required~~ recommended Mitigation Measure MM VEG-7 ...

F001-96

Page 4.3-56, 4.3.15 Alternative E, Residual Impacts and Unavoidable Adverse Effects

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With the implementation of Mitigation Measures MM VEG-1 through MM VEG-9, residual impacts to vegetation resources would be (1) the net loss of vegetation and habitat on the alignment; (2) the direct effects of dust and other disturbances to adjacent off-site habitat during construction, operation, and decommissioning of the gen-tie line; (3) the net loss of special-status plant occurrences on the alignment; and (4) the net loss of state-jurisdictional streambeds on the alignment. These impacts are described above, under direct impacts of project construction. The net loss of the native vegetation and related resources (including habitat and streambed values), would be reduced over time through habitat compensation, which is expected to prevent future losses of habitat by placing a permanent conservation easement and deed restrictions on private lands that could otherwise be converted for urban, agricultural, or energy development.

F001-97

Page 4.3-63. 4.3.16 Cumulative Effects, Native Vegetation Including Sensitive Natural Communities, first full paragraph of the page

The solar facility site is mapped as Sonoran Creosote Bush Scrub (661 acres) and Desert Dry Wash Woodland (547 acres) in the NECO plant communities dataset. A total of 3,829,999 acres of Sonoran Creosote Bush Scrub and 682,027 acres of Desert Dry Wash Woodland are mapped within the NECO planning area. Existing and foreseeable projects would impact 172,551 acres of Sonoran Creosote Bush Scrub and 44,300 acres of Desert Dry Wash Woodland. The proposed project or its alternatives would contribute at most about 0.4 percent ~~at least incrementally to~~ of the cumulative loss of Sonoran Creosote Bush Scrub and between 0.9 and 1.2 percent of the cumulative loss of Desert Dry Wash Woodland.

F001-98

Page 4.4-65. The DEIS states that Alternatives 4 through 7 would "contribute considerably to the cumulatively significant impacts of habitat loss for special-status wildlife species in the NECO planning area, and reduced wildlife movement and connectivity in the upper Chuckwalla Valley." Please reconcile this conclusion with the statement on page 4.4-63 of the DEIS under "Wildlife Movement and Habitat Connectivity" that "the contribution of the proposed project or its alternatives would be relatively minor."

F001-99

Page 4.3-65. 4.3.16 Cumulative Effects, Special-status Plants, last paragraph of the page, continuing to p 4.3-66

A variety of special-status plant species have ranges that extend through the Mojave and Colorado Deserts of the NECO planning area, and several are endemic to the planning area. ~~Three (3)~~ Five (5) special-status plants occur on the solar facility site and gen-tie alternative alignments: crucifixion thorn (CRPR 2.3), Harwood's woollystar (CRPR 1B.2), Utah vine milkweed (CRPR 4.2), ribbed cryptantha (CRPR 4.3), and desert unicorn-plant (CRPR 3.3). ~~Several other special-status plants may occur on gen-tie alignment Alternative E, but spring season botanical surveys have not yet been conducted.~~

Page 4.3-66. Special-status Plants, second full paragraph of the page

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Mitigation Measure MM VEG-7 (Mitigate direct impacts to special-status plants) would reduce the incremental contribution of the proposed project or its alternatives to cumulative impacts to Emory's crucifixion thorn, Harwood's woollystar, and other CRPR 1 or 2 special-status plants…. The project's effects on the ~~two~~ three CRPR 4 species, while adverse, would not warrant further mitigation due to the higher regional abundance and the very low density of these species on site.

F001-99 cont.

Page 4.3-67. Please revise the last sentence of the "Alternative 3" paragraph, which inadvertently refers to "Alternative 2" instead of "Alternative 3."

F001-100

4.4 Biological Resources – Wildlife

F001-101

Page 4.4-1. Please update the first paragraph of the page to reflect enXco's 2011-2012 golden eagle surveys, 2012 nesting surveys for Gila woodpecker, and 2012 surveys of gen-tie Alt E for desert tortoise, burrowing owl, desert kit fox, and Mojave fringe-toed lizard as follows:

This analysis is based on information from the focused wildlife surveys, habitat assessments, recon-naissance surveys, and avian point-count studies conducted for the Desert Harvest Solar Project (DHSP), as well as information found in the CNDDB and lists of special-status species for the region (see Chapter 3.4). As discussed in Chapter 3.4, ~~and~~ the Biological Resources Technical Report (BRTR) and the BRTR Supplement for Gen-Tie Alternative E ~~(~~both located in Appendix C), focused wildlife surveys were conducted concurrently for desert tortoise (Gopherus agassizii) and burrowing owl (Athene cunicularia), a habitat assessment was conducted for the Mojave fringe-toed lizard (Uma scoparia), ~~and~~ winter and spring avian point counts were conducted according the Bureau of Land Management (BLM) protocol for solar energy developments, a focused survey for Gila woodpecker (Melanerpes uropygialis) was conducted on the proposed solar facility site, and winter surveys for golden eagle (Aquila chrysaetos) were conducted throughout a 10-mile radius surrounding the project site. A discussion of the vegetation resources currently present in the project area is provided in Chapter 3.3, and impacts to vegetation resources are addressed in Chapter 4.3.

Page 4.4-1. Please revise the fourth paragraph of the page to as follows: " Alternatives ~~3~~ 4 and B, the ~~Applicant's~~ proposed solar project and gen-tie line (proposed project).".

F001-102

Page 4.4-5. last paragraph of page, continuing to 4.4-6, Wildlife Mortality

…This direct adverse impact to wildlife ~~would~~ could be substantial but can be somewhat reduced through Mitigation Measure MM WIL-1 (Wildlife Impact Avoidance and Minimization)… Even with implementation sof MM WIL-1, initial clearing and site preparation work ~~would likely~~could cause mortality among most small mammals and reptiles ~~which would be~~ unable to escape.

F001-103

COMMENT SET F001, CONT.
ENXCO

F001-104

Page 4.4-7. Please qualify the analysis of potential desert tortoise impacts on the page by summarizing the low habitat quality values assigned to the project site by the 2009 USGS Desert Tortoise Habitat Model (Nussear et al. 2009), which, from a scale of 0.0 to 1, assigns a value of "0" to 718.6 acres of the proposed project's solar field, a value of "0.1" to 484 acres of the proposed project's solar field, and a value of "0.2" to the remaining 4.6 acres of the solar field. enXco recommends the following language:

Desert Tortoise. Desert tortoises have not been documented within the solar facility site, but are expected to be present based on nearby known occurrences and desert tortoise sign located on the site during field surveys (see BRTR, Appendix C). None of the burrows or other sign observed on the site exhibited any evidence of recent use. The proposed solar facility site is relatively low value habitat for desert tortoise. –The USGS Desert Tortoise Habitat Model (Nussear et al. 2009), using a scale of 0.0 to 1.0, assigns a value of 0 to 718.6 acres of the proposed project's solar field, a value of 0.1 to 484 acres of the proposed project's solar field, and a value of 0.2 to the remaining 4.6 acres of the solar field. Desert tortoises are found throughout the region and are mobile during their active seasons. Based on the presence of active desert tortoises on the adjacent Desert Sunlight Solar Farm Project (Desert Sunlight) site, it was determined that the entire solar facility site may be occupied by desert tortoises at any time, albeit only in low numbers. Extrapolations from the Desert Sunlight site are conservative, however, given the fact that the Desert Sunlight Solar Farm Project has a higher habitat quality value under the USGS Desert Tortoise Habitat Model (Nussear et al. 2009) than the Desert Harvest project site Implementation of Alternative 4 would result in the permanent and long-term loss of 1,208 acres of desert tortoise habitat, presumed to be occupied, and located within a geographic region that is occupied by desert tortoises. Project construction would also prevent desert tortoises from crossing the solar facility site to access habitat elsewhere in or around the Chuckwalla Valley.

F001-105

Page 4.4-8. Please revise the second sentence of the first paragraph of the "Translocation" section as follows to better reflect the possibility of observational error: "...or tortoise eggs, ~~would~~ could be overlooked..."

F001-106

Page 4.4-10. Please make the following addition to the second sentence of the first paragraph of the page: "Upon completion of a final Desert Tortoise Translocation Plan and issuance of the Biological Opinion from USFWS and Incidental Take Permit or Consistency Determination from CDFG, the Applicant shall adopt measures to either translocate tortoises into the wild or to permanently place them in approved facilities."

F001-107

Page 4.4-10. enXco recommends drawing from Section 3.4 of the DEIS to explain in the "Special-Status Reptiles and Amphibians" section why the project site does not provide suitable habitat for Mojave fringe-toed lizard as follows:

Based on habitat and geographic range, desert tortoise and rosy boa are the only special-status reptile or amphibian species with a moderate or greater probability of occurring on the project

COMMENT SET F001, CONT.
ENXCO

F001-107 cont.

site (Section 3.4). The Mojave fringe-toed lizard, a BLM Sensitive Species known from the area, is not expected to occur on the site due to absence of suitable aeolian sand habitat. No other BLM-designated Sensitive reptile or amphibian species are known from the project study area (see Section 3.4 and Appendices C.6 and C.13). Project impacts and mitigation for desert tortoises are described above.

F001-108

Page 4.4-12 through 4.4-13. Please revise the "Golden Eagle" section to reflect nesting data obtained since publication of the DEIS:

Golden Eagle. … These territories comprise eight golden eagle nests that were inactive in 2010, and one nest where eagle activity was observed but no young were fledged in 2010 (BLM 2011b; see Section 3.4). Since preparation of the DEIS, the 10-mile radius surrounding the project area was re-surveyed for golden eagle nesting activity during spring 2012. Early nesting activity ("nest decoration") was observed at one nest, but there was no subsequent activity; no eggs or young were present in the nest, and the adult golden eagles did not remain at the site (personal communication, Dr. L.F. LaPre, BLM Wildlife Biologist, Moreno Valley, Calif.).

F001-109

Page 4.4-14. Second full paragraph of page, Gila woodpecker (note missing hard return)

…Gila woodpecker was observed within the project area while setting up the winter point count locations, but was not observed during the subsequent 2011 winter or spring point counts. In spring 2012, all desert dry wash woodland habitat was surveyed to determine presence or absence of breeding Gila woodpeckers, but no further Gila woodpecker observations were recorded (AMEC in prep [enXco will submit final report as soon as available]).

F001-110

Page 4.4-17. The second sentence of the first paragraph of the "Wildlife Movement" section states that analysis for the EIS commenced in November 2011. enXco recommends revising as follows:

The DHSP solar facility site is immediately south of the recently approved Desert Sunlight site. At the time of commencement of analysis for this EIS in ~~November~~ September 2011…

F001-111

Page 4.4-17. enXco recommends adding a sentence to the second paragraph of the page that further substantiates the proposed project's limited effect on wildlife movement based on its occupying less than 0.6 percent of the Chuckwalla Valley, its limited movement value due to adjacency to the approved Desert Sunlight project under construction as of September 2011, and the fact that many potential impediments to movement – such as fencing along highways, canals, human habitation – already exist in the Chuckwalla Valley. Finally, the project site is located in the vicinity of significant agricultural disturbance at the southern extreme of the mountains forming the western and eastern boundaries of the Chuckwalla Valley. Intermountain movements are more likely to occur in the less disturbed northern reaches of the Chuckwalla Valley. enXco recommends the following language, so as to take into consideration the

COMMENT SET F001, CONT.
ENXCO

F001-111

alternative to facilitate wildlife movement that was identified but eliminated from further analysis on pages 2-67 and 2-68 of the DEIS

… Project construction would further limit connectivity by eliminating movement opportunities across the site for most wildlife species, but the actual consequence to wildlife movement would be minor due to the land uses and movement barriers described above. Intermountain movements are more likely to occur in the less disturbed northern reaches of the Chuckwalla Valley. ~~The project description (Chapter 2) does not propose to specify or designate wildlife corridors.~~ The limited wildlife connectivity value of the project site is also explained in Section 2.17, which assesses a proposal to specify or designate a wildlife movement route through the abovementioned small corridor to the east of the proposed solar facility site.

F001-112

Page 4.4-18. Please supplement the "Wildlife Management Areas" paragraph with language explaining that, while the Palen-Ford WHMA does overlap the northeastern parcel of proposed project site, the Palen-Ford WHMA was specifically established to protect dunes and playas (BLM and CDFG 2002), features which – along with the Mojave fringe-toed lizard they support – do not exist on the project site. While the proposed project may affect the map depicting the Palen-Ford WHMA boundary, the proposed project does not affect the resources the Palen-Ford WHMA was created to protect (*see, e.g.*, pages 3.4-20 and 3.4-21 of the DEIS). As stated in the DEIS, "The solar facility and most of the alternative gen-tie alignments would not affect Mojave fringe-toed lizard or its habitat." (page 4.4.-59). enXco recommends the following language:

... The western edge of the southwestern parcel is adjacent to the Chuckwalla DWMA, and 46 acres of the Palen-Ford WHMA are included within the northern portion of the northeastern parcel (see Table 4.4-1 and Figure 3.4-1 in Appendix A). The Palen-Ford WHMA was established to protect dunes and playas (BLM and CDFG 2002), which are not present on the project site. Additionally, the 46 acres of the WHMA that are within the DHSP project site are isolated from the remainder of the WHMA, and from the dunes and playa system to the east, by the intervening DSSF project now under construction (see Figures 3.1-1 and 3.4-1). This portion of the WHMA no longer functions in its intended purpose. While the DHSP would affect the mapped WHMA boundary, it would not affect the resources the WHMA was created to protect (e.g., Mojave fringe-toed lizard, Section 3.4.5).

Page 4.4-21. The "Solar Panel Light, Glare and Collision Risk" paragraph should distinguish between the potential glare effects of heliostats (mirrors) and solar PV panels, which have a reflectivity substantially lower than that of window glass. *See, e.g.,* Appendix B of Kern County's RE Distributed Solar Project (July 2011), which enXco incorporates by reference:

F001-113

Large-scale solar facilities present a relatively new and un-researched risk for bird collisions. Studies conducted at the Solar One facility, a central receiver solar power plant near Daggett, California, indicated that bird mortality consisted predominantly of collisions with mirrors (McCrary et al 1986). However, photovoltaic solar panels are designed to absorb, rather than

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F001-113 cont.

reflect, light. While CSP systems are designed to reflect up to 90% of incoming sunlight, the glare and reflectance from PV panels is much lower; as little as 2% of direct and indirect sunlight is reflected (FAA Solar Guide, Section 3.1.2, 2012).[1]

To date, little is known regard-ing the avian response to reflection or glare from PV solar technology; however, it is likely that glare will affect birds to some degree because the panels would reflect light and images, and might be mistaken for open sky or water.

F001-114

Page 4.4-22. enXco recommends the following revisions.

The indirect effects of project ~~decommissioning~~ O&M to wildlife and wildlife habitat include the introduction or spread of invasive weeds, depletion of groundwater and subsequent effects to groundwater-dependent vegetation and habitat, alteration of ephemeral surface water flows, and increased predation due to predator "subsidies," ~~provided during construction.~~ The indirect effects to wildlife of invasive weeds and groundwater depletion, and mitigation of those effects, are as described in Section 4.3. The indirect effects of predator subsidies during project ~~decommissioning~~O&M, and mitigation of those effects would be as described under indirect effects of construction.

F001-115

Page 4.4-26. Regarding MM WIL-1, numbered paragraph 9 (Minimize noise impacts). enXco is concerned that the 65 dBA threshold, applied to all construction activities and all surrounding nesting habitat, would restrict scheduling to the point that project construction would be unfeasible. enXco recommends instead that noise impacts to wildlife and habitat surrounding the project area should be managed according to the wildlife species affected, its tolerance of human activities, its conservation status, and the timing and nature of specific construction activities. Rather than specify dBA thresholds in this mitigation measure, we recommend that the BLM adopt a requirement that enXco prepare a Nesting Bird Management Plan. Please also refer to our recommended revisions to MM WIL-3, below. enXco requests the following edits to MM WIL-1:

> **9. Minimize Noise Impacts.** To minimize disturbance to wildlife nesting or breeding activities in surrounding habitat. ~~L~~loud construction activities (e.g., pile driving) shall be avoided to the extent feasible from February 1 to August 31 ~~when it would result in noise levels over 65 dBA in nesting habitat adjacent to the project area.~~ Loud construction activities may be permitted from February 1 to August 31 only according to the provisions of the Nesting Bird Management Plan ~~if the Designated Biologist provides documentation (i.e., nesting bird data collected using methods~~ described in MM WIL-3 ~~and maps depicting location of the nest survey area in relation to noisy construction) to the BLM's Authorized Officer, Riverside County, and the Resource Agencies indicating that no active nests would be subject to noise levels over 65 dBA.~~

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[1] http://www.faa.gov/airports/environmental/policy_guidance/media/airport_solar_guide_print.pdf

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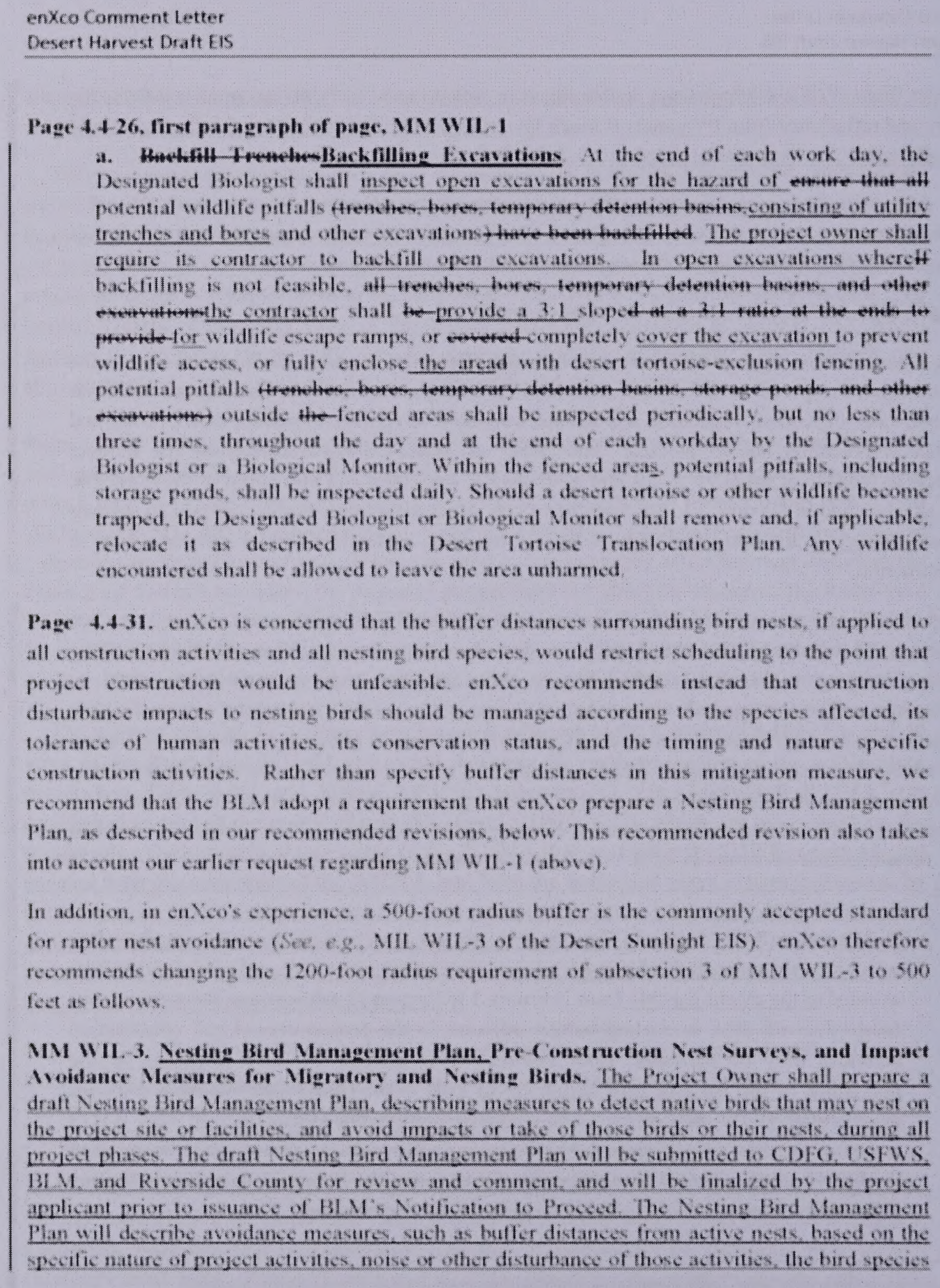
ENXCO



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Page 4.4-26, first paragraph of page, MM WIL-1

a. ~~Backfill Trenches~~Backfilling Excavations. At the end of each work day, the Designated Biologist shall inspect open excavations for the hazard of ~~ensure that all~~ potential wildlife pitfalls ~~(trenches, bores, temporary detention basins,~~consisting of utility trenches and bores and other excavations~~) have been backfilled~~. The project owner shall require its contractor to backfill open excavations. In open excavations where~~If~~ backfilling is not feasible, ~~all trenches, bores, temporary detention basins, and other excavations~~the contractor shall ~~be~~ provide a 3:1 slope~~d at a 3:1 ratio at the ends to provide~~ for wildlife escape ramps, or ~~covered~~ completely cover the excavation to prevent wildlife access, or fully enclose the aread with desert tortoise-exclusion fencing. All potential pitfalls ~~(trenches, bores, temporary detention basins, storage ponds, and other excavations)~~ outside ~~the~~ fenced areas shall be inspected periodically, but no less than three times, throughout the day and at the end of each workday by the Designated Biologist or a Biological Monitor. Within the fenced areas, potential pitfalls, including storage ponds, shall be inspected daily. Should a desert tortoise or other wildlife become trapped, the Designated Biologist or Biological Monitor shall remove and, if applicable, relocate it as described in the Desert Tortoise Translocation Plan. Any wildlife encountered shall be allowed to leave the area unharmed.

F001-116

Page 4.4-31. enXco is concerned that the buffer distances surrounding bird nests, if applied to all construction activities and all nesting bird species, would restrict scheduling to the point that project construction would be unfeasible. enXco recommends instead that construction disturbance impacts to nesting birds should be managed according to the species affected, its tolerance of human activities, its conservation status, and the timing and nature specific construction activities. Rather than specify buffer distances in this mitigation measure, we recommend that the BLM adopt a requirement that enXco prepare a Nesting Bird Management Plan, as described in our recommended revisions, below. This recommended revision also takes into account our earlier request regarding MM WIL-1 (above).

In addition, in enXco's experience, a 500-foot radius buffer is the commonly accepted standard for raptor nest avoidance (*See, e.g.*, MIL WIL-3 of the Desert Sunlight EIS). enXco therefore recommends changing the 1200-foot radius requirement of subsection 3 of MM WIL-3 to 500 feet as follows.

MM WIL-3. Nesting Bird Management Plan, Pre-Construction Nest Surveys, and Impact Avoidance Measures for Migratory and Nesting Birds. The Project Owner shall prepare a draft Nesting Bird Management Plan, describing measures to detect native birds that may nest on the project site or facilities, and avoid impacts or take of those birds or their nests, during all project phases. The draft Nesting Bird Management Plan will be submitted to CDFG, USFWS, BLM, and Riverside County for review and comment, and will be finalized by the project applicant prior to issuance of BLM's Notification to Proceed. The Nesting Bird Management Plan will describe avoidance measures, such as buffer distances from active nests, based on the specific nature of project activities, noise or other disturbance of those activities, the bird species

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ENXCO

F001-116 cont.

and conservation status, and other pertinent factors. The Plan will specify 330 feet as a general buffer distance, and 500 feet for raptor species. The Plan will also identify bird species (or groups of species) that are relatively tolerant or intolerant of human activities and specify smaller or larger buffer distances as appropriate for those species. Additionally, the Plan will list all project construction activities and rank them in terms of noise and other potential disturbance to nesting birds, and specify any modifications to buffer areas as appropriate to activity. For example, vehicle travel along an access route would likely warrant buffer distance reductions, whereas pile driving may necessitate buffer increases. The Plan also will identify specific measures (if any) to prevent or reduce bird nesting activity on project facilities. The Plan will include specific monitoring measures to track any active bird nest within or adjacent to the project site, bird nesting activity, project-related disturbance, and fate of each nest. The Nesting Bird Management Plan may be incorporated into the Bird and Bat Conservation Strategy (MM WIL-6) as a separate chapter.

[Note, enXco has no changes recommended to remainder of introductory section or to list items 1 or 2]

3. If active nests are detected during the survey, the Project Owner will implement avoidance measures identified in the Nesting Bird Management Plan, and the Designated Biologist will be responsible for monitoring the implementation, conformance, and efficacy of those measures, according to monitoring requirements specified in the Nesting Bird Management Plan. ~~a 330 foot radius buffer zone surrounding the nest shall be flagged, and no impacts to soils or vegetation or noise above 65 dBA, will be permitted while the nest remains active. For any active raptor nests or bat maternity roosts, the flagged buffer zone avoidance area shall be a 1200 foot radius surrounding the nest or roost site. This protected area surrounding the nest may be adjusted by the Designated Biologist in consultation with BLM, Riverside County, CDFG, and USFWS.~~

~~4. A monitoring plan shall be prepared and implemented to ensure no disturbance to active nests present within or adjacent to the work area takes place; the plan shall be reviewed and approved by BLM, Riverside County, USFWS, and CDFG prior to the initiation of ground-disturbing activities.~~ [language here regarding the monitoring plan is incorporated into enXco's recommended additions to the introductory paragraph]

F001-117

Page 4.4-35. MM WIL-5 requires winter golden eagle surveys in addition to nesting surveys. enXco questions the need for winter surveys. The presence of golden eagles in Chuckwalla Valley during winter has been documented through field surveys contracted by enXco (Appendix C. 7 of the DEIS) and potential impacts to golden eagles have been analyzed in the DEIS. enXco does not believe the DHSP has potential to "take" or "disturb" golden eagles as those terms are defined by the USFWS and quoted in Section 3.4 of the DEIS. The potential to "take" or "disturb" golden eagles is especially unlikely during winter, when likelihood of observable project-related impacts to productivity or nest abandonment would be negligible. It is our understanding that BLM has not required winter surveys for other projects, DSSF being one such example. We also note that the DEIS, in Sections 4.4.7 and 4.4.12, describes MM WIL-5 as requiring "nesting season surveys" without mentioning winter surveys. enXco therefore recommends the revisions shown below.

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ENXCO

In addition, as a separate issue, enXco recommends revisions to preserve its ability to incorporate survey results reported to agencies by third parties not under contract with enXco. The recommended revisions below incorporate both of these points. F001-117

1. Annual ~~Winter and~~ Nesting Season Surveys. Beginning in the first breeding season of project construction~~winter 2011-12~~, and continuing throughout the construction phase of the project, the project Owner shall obtain, by contract with a qualified ornithologist or through publicly available records, ~~to conduct winter season and~~ nesting season survey data ~~s~~ of golden eagle habitat use in Chuckwalla Valley and surrounding mountains within a 10-mile radius of the project site and gen-tie alignment. Nesting season surveys will determine occupancy of known or newly discovered nesting territories within the 10-mile radius. Survey methods for the inventory shall be either ground-based or helicopter-based, as described in the Golden Eagle Technical Guidance (Pagel et al. 2010) or more current guidance from the USFWS. ~~Winter surveys will evaluate golden eagle occurrence and habitat use within the 10 mile radius during winter.~~

~~**2. Winter Season Survey Data**. Data collected during winter season surveys shall include dates, times, locations, and weather conditions during field sur-veys; panoramic photographs from the survey locations, indicating areas viewed; and compilations of all golden eagle and other raptor observations for each survey date.~~

Page 4.4.-37. First (partial) paragraph of page, MM WIL-7. Mitigation Measure WIL-7 requires USFWS to review and approve a Draft Passive Relocation Plan for Desert Kit Fox and American Badger. As neither species enjoys special status within the purview of USFWS enXco recommends the following revision: F001-118

The Draft Passive Relocation Plan shall be submitted to CDFG, and BLM~~, and USFWS~~ for review and approval prior to implementation.

8. The Plan will ~~include~~ provide CDFG ~~and other resource agencies~~ the opportunity to test animals for canine distemper virus, vaccinate them against it, fit the animals with radio collars for follow-up tracking, or take other management actions as appropriate.

9. A written memorandum documenting the implementation of the removal or forced dispersal shall be provided to BLM, Riverside County, CDFG~~, USFWS~~, and JTNP within 30 days of completion.

Page 4.4-42. The second sentence of the first paragraph of Section 4.4.12 states that analysis for the EIS commenced in November 2011. enXco recommends the following revision: F001-119

… At the time of commencement of analysis for this EIS in ~~November~~ September 2011, the approved Desert Sunlight gen-tie has not yet been constructed…

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ENXCO

F001-120

Pages 4.4-48 and 4.4-49. Please supplement the "Nesting Birds" section of the page with a reference to the mitigating effects of MM WIL-6, using the first paragraph of page 4.4-22 as a model. enXco recommends the following language:

… The nesting behaviors of some native birds increases the likelihood that project O&M would require the removal or relocation of active nests in order to safely operate the facility. Mitigation Measure MM WIL-6 (Bird and Bat Conservation Plan) would require an evaluation of potential project hazards to birds and bats, and implementation of adaptive management measures as appropriate to address them. This measure is expected to mitigate this potential risk to the extent feasible, but an unknown residual risk to birds may remain, even with implementation of the Bird and Bat Conservation Plan.

F001-121

Page 4.4-50. For clarification, please explain in the first paragraph of Section 4.4.13 that the 60-foot extension of the Alternative C ROW into the adjacent Chuckwalla DWMA is required solely to accommodate intermittent "wind sway" of overhaning conductors over the DWMA boundary. enXco recommends the following language:

… The Alternative C ROW would extend west of the approved DSSF gen-tie ROW, 60 feet into the adjacent Chuckwalla DWMA. This extension into the DWMA is required solely to accommodate the overhang of transmission line conductors from the tower cross-members. No planned temporary or permanent ground disturbance would occur within the DWMA…

F001-122

Page 4.4-51. For economy, enXco suggests replacing the language contained in the "Residual Impacts and Unavoidable Adverse Effects" subsection of the page with the following: "With the implementation of Mitigation Measures MM VEG1 rough VEG-8 and MM WIL-1 through MM WIL-8, the residual impacts to wildlife resources under Alternative C would be the same as those for Alternative B."

Page 4.4-52. For economy, enXco suggests replacing the language contained in the "Residual Impacts and Unavoidable Adverse Effects" subsection of the page with the following: "With the implementation of Mitigation Measures MM VEG1 rough VEG-8 and MM WIL-1 through MM WIL-8, the residual impacts to wildlife resources under Alternative D would be the same as those for Alternative B."

F001-123

Page 4.4-52, third full paragraph of page, Section 4.4.15

Mojave Fringe-toed Lizard and Palm Springs Round-Tailed Ground Squirrel. Project construction would affect ~~suitable~~ occupied habitat for Mojave fringe-toed lizard and suitable habitat for Palm Springs round-tailed ground squirrel along the gen-tie line alignment…

F001-124

Page 4.4.-55. Please revise the first sentence of the first complete paragraph of the page as follows: "The project site supports habitat for, and in some instances populations of, numerous special-status wildlife species…" Please also consider clarifying at the end of the first complete

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ENXCO

paragraph of the page that the wildlife movement cumulative analysis considers other cumulative projects in addition to Desert Sunlight. F001-124

Page 4.4-56, first paragraph of page, Section 4.4.16 (typo) F001-125

Alternative B would not contribute to cumulative ~~vegetation~~ wildlife effects…

Page 4.4-57. The last paragraph of the page could be misread to state that the USGS Desert Tortoise Habitat Model identifies the project area – as opposed to the Colorado Desert Recovery Unit – as medium to high quality desert tortoise habitat (0.4-0.9). enXco recommends the following revision: F001-126

The USGS Desert Tortoise Habitat Model maps ~~the project area and~~ most of Colorado Desert Recovery Unit as medium- to high-quality desert tortoise habitat, with scores of 0.4-0.9 on a scale of 0 to 1 (1 being the highest quality). But the habitat model ascribes a low quality habitat value (0.0-0.1) to the vast majority of the DHSP footprint. The DHSP's effects on desert tortoise habitat (based on the 2009 USGS habitat model) are quantified in Table 4.4-4.

Page 4.4-63. Please insert language in the "Wildlife Management Areas" paragraph of the page explaining that the contribution of the proposed project to cumulative effects on the Palen-Ford WHMA would not be substantial because, while the proposed project may affect the map depicting the Palen-Ford WHMA boundary, the proposed project does not affect the resources the Palen-Ford WHMA was created to protect (please see our comment on Page 4.4-18, above, for more detail). enXco recommends the following addition: F001-127

The DHSP's contribution to cumulative impacts to the Palen-Ford WHMA would not be substantial. The WHMA was established to protect dunes and playas (BLM and CDFG 2002), which are not present on the project site. Additionally, the 46 acres of the WHMA that are within the DHSP project site are isolated from the remainder of the WHMA, and from the dunes and playa system to the east, by the intervening DSSF project now under construction (see Figures 3.1-1 and 3.4-1). This portion of the WHMA no longer functions in its intended purpose. While the DHSP would affect the mapped WHMA boundary, it would not affect the resources the WHMA was created to protect (e.g., Mojave fringe-toed lizard, Section 3.4.5).

Page 4.4-65. The DEIS states that Alternatives 4 through 7 would "contribute considerably to the cumulatively significant impacts of habitat loss for special-status wildlife species in the NECO planning area, and reduced wildlife movement and connectivity in the upper Chuckwalla Valley." The DEIS also concludes in multiple areas that the contribution of the project to loss of wildlife connectivity would be relatively minor [DEIS at 4.4-17 and 4.4-62]. enXco recommends clarifying that while the DHSP contribution to the reduced wildlife movement and connectivity is individually minor, it would make a cumulatively considerable contribution to habitat loss for special-status wildlife species in the NECO planning area, and reduced wildlife movement and connectivity in the upper Chuckwalla Valley. Mitigation Measure VEG-6 reduces F001-128

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ENXCO

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the project's contribution to cumulative effects but there are still minor residual effects that could contribute to cumulative effects.

"**Alternative 4.** …

The cumulative impacts of existing and reasonably foreseeable development to special-status wildlife and habitat (including listed threatened or endangered species), and wildlife movement, are significant within the region (criteria WIL-1 and WIL-2). The individual contributions of Alternative 4 to these cumulative effects would be minor and mitigated in part through mitigation measures described in Sections 4.3.7 and 4.4.7, particularly Mitigation Measures MM VEG-6 (Provide Off-Site Compensation for Impacts to Vegetation and Habitat). Even with implementation of mitigation, the residual impacts of Alternative 4 would have a cumulatively considerable contribution to ~~cumulatively~~ significant habitat loss for special-status wildlife species in the NECO planning area, and reduced wildlife movement and connectivity in the upper Chuckwalla Valley. Therefore, cumulative impacts would remain significant and unavoidable under criteria WIL-1 and WIL-2."

F001-129

Page 4.4-66, second full paragraph of page, Section 4.4.17 (typo)

Alternative B would not contribute to cumulative ~~vegetation~~ wildlife effects…

F001-130

Section 4.6 Cultural Resources

General Comment: Please refer to summary comments related to cultural resources in Section 3.6 of this comment letter, for references to status of BLM Class III surveys and inventories, NRHP resource status, and Section 106 initiation.

General Comment: Chapter 4.6 refers in several places to a "pipeline" as a component of the proposed project. No pipeline is part of the proposed project. Please delete all pipeline references.

F001-131

Section 4.6.1, p. 4.6-1, paragraph 3: The five steps should be revised to indicate that inventory provides a list of potential historic properties and that a resource achieves "historic property" status only if it is found to be eligible for the NRHP. Also revise to indicate that only adverse effects to historic properties must be resolved.

F001-132

Section 4.6.1, p. 4.6-2, Archaeological Resources Inventory: Status of the archaeological surveys should be revised to show that only 98.3 acres of Alternative D Gen-tie (4 percent of the project and alternative gen-ties) have not been subjected to intensive survey because of denial of access by private landowners.

F001-133

Section 4.6.2, p. 4.6-3, Applicant Measures: Although only one Applicant Measure has been proposed for cultural resources, it should be characterized as a comprehensive plan that will ensure resolution of any adverse effects and discovery and proper treatment of historic properties

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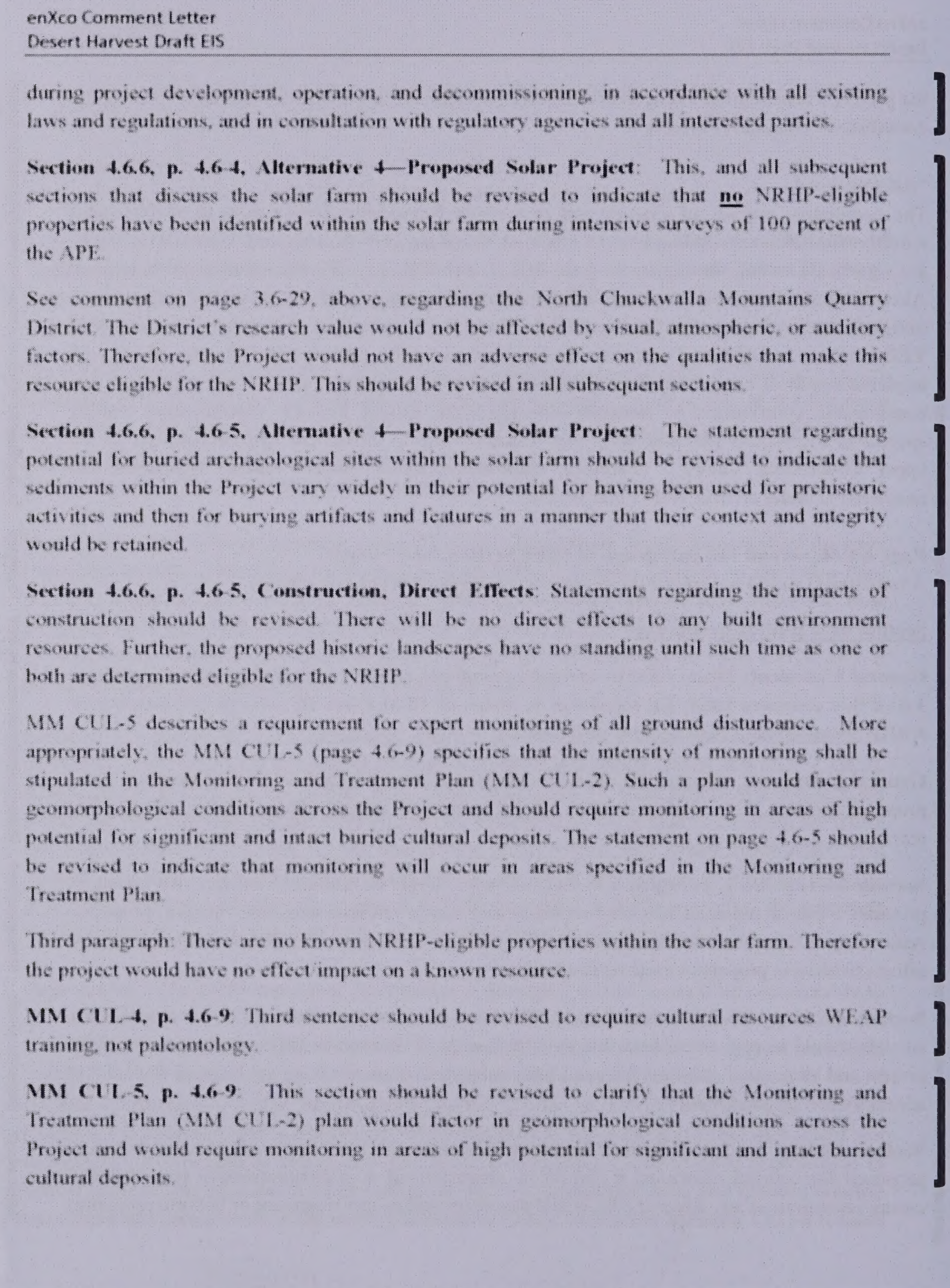

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during project development, operation, and decommissioning, in accordance with all existing laws and regulations, and in consultation with regulatory agencies and all interested parties.

F001-133

Section 4.6.6, p. 4.6-4, Alternative 4—Proposed Solar Project: This, and all subsequent sections that discuss the solar farm should be revised to indicate that **no** NRHP-eligible properties have been identified within the solar farm during intensive surveys of 100 percent of the APE.

See comment on page 3.6-29, above, regarding the North Chuckwalla Mountains Quarry District. The District's research value would not be affected by visual, atmospheric, or auditory factors. Therefore, the Project would not have an adverse effect on the qualities that make this resource eligible for the NRHP. This should be revised in all subsequent sections.

F001-134

Section 4.6.6, p. 4.6-5, Alternative 4—Proposed Solar Project: The statement regarding potential for buried archaeological sites within the solar farm should be revised to indicate that sediments within the Project vary widely in their potential for having been used for prehistoric activities and then for burying artifacts and features in a manner that their context and integrity would be retained.

F001-135

Section 4.6.6, p. 4.6-5, Construction, Direct Effects: Statements regarding the impacts of construction should be revised. There will be no direct effects to any built environment resources. Further, the proposed historic landscapes have no standing until such time as one or both are determined eligible for the NRHP.

MM CUL-5 describes a requirement for expert monitoring of all ground disturbance. More appropriately, the MM CUL-5 (page 4.6-9) specifies that the intensity of monitoring shall be stipulated in the Monitoring and Treatment Plan (MM CUL-2). Such a plan would factor in geomorphological conditions across the Project and should require monitoring in areas of high potential for significant and intact buried cultural deposits. The statement on page 4.6-5 should be revised to indicate that monitoring will occur in areas specified in the Monitoring and Treatment Plan.

Third paragraph: There are no known NRHP-eligible properties within the solar farm. Therefore the project would have no effect/impact on a known resource.

F001-136

MM CUL-4, p. 4.6-9: Third sentence should be revised to require cultural resources WEAP training, not paleontology.

F001-137

MM CUL-5, p. 4.6-9: This section should be revised to clarify that the Monitoring and Treatment Plan (MM CUL-2) plan would factor in geomorphological conditions across the Project and would require monitoring in areas of high potential for significant and intact buried cultural deposits.

F001-138

COMMENT SET F001, CONT.
ENXCO

F001-139

Section 4.6.11, p. 4.6-13, Alternative B: This and subsequent gen-tie analyses should acknowledge the real potential for avoiding and protecting historic properties even if they are within the inventoried APE. Widely spaced transmission poles such as these can often be designed and constructed to eliminate potential for directly affecting discrete cultural resources. The analysis of this Alternative Gen-tie for the Desert Sunlight Project indicated that of the 18 known archaeological resources in the APE, only one was NRHP eligible and six were not evaluated because they could be avoided. The other eleven were found to be not NRHP eligible. Finally, it should be stated that construction of the transmission poles will require very limited ground disturbance, thus minimizing the potential to encounter buried archaeological sites.

F001-140

Section 4.6.15, p. 4.6-26, The Desert Harvest Solar Project in the Cumulative Context: This section should be revised to reflect the current inventory of historic properties that would actually be affected by the Project. The solar farm would have no direct effect on known historic properties. Of the three gen-tie corridors, Alternative B/C would have the greatest potential for direct effects to historic properties (one eligible and six unevaluated); through project design, however, impacts to all but the known NRHP eligible site could likely be avoided. Further, the known eligible site is the town dump for Desert Center and consists of hundreds of discrete refuse deposits, only a few of which would be affected.

Indirect effects of the project would appear to be limited to visual effects to the North Chuckwalla Mountains Petroglyph District, pending the results of tribal consultation, and more recent built environment resources.

F001-141

Section 4.6.16, p. 4.6-28, CEQA Considerations, Alternative 4: This section refers to MM CUL-1 through MM CUL-9 and discusses an MOA and HPTP. MM CUL-8 and CUL-9 have not been introduced prior to this reference and we presume that they have been eliminated. More important, none of the other Mitigation Measures discuss an MOA or HPTP. MM CUL-2 (page 4.6-7) describes a Monitoring and Treatment Plan. Typically if a project is determined under Section 106 to have an adverse effect on historic properties, the resolution of adverse effects is memorialized in an MOA document and treatments are detailed in an HPTP. If the BLM anticipates a Finding of Adverse Effect for the project, reference to an MOA and treatment documents should be made within MM CUL-2.

F001-142

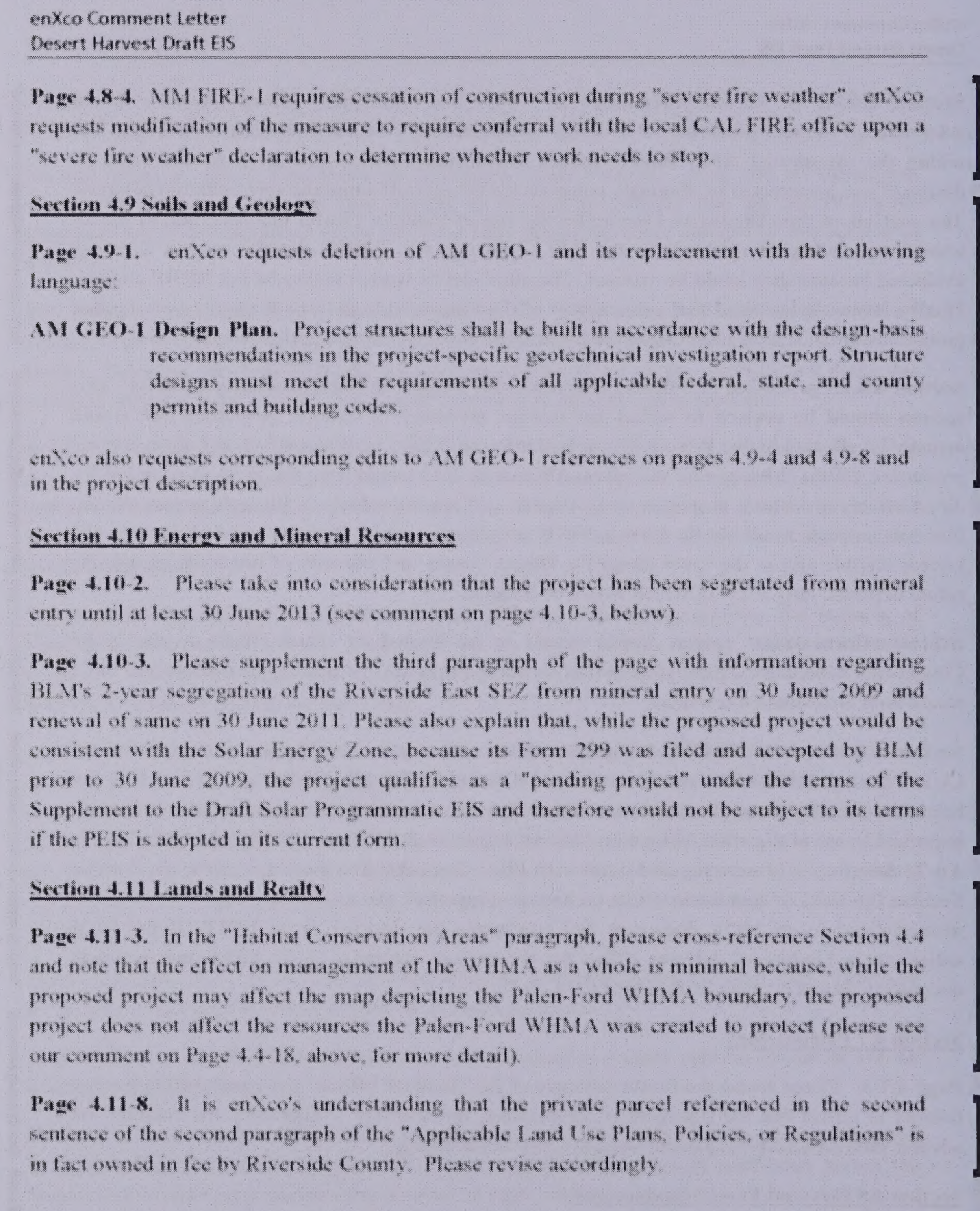
Section 4.7 Paleontology

Page 4.7-3. Please revise the fourth sentence of the "Indirect Effects" paragraph of the page as follows to reflect that the statement is comparative, not absolute: "Therefore, the potential for adverse indirect effects on paleontological resources is higher."

F001-143

Section 4.8 Fire and Fuels Management

COMMENT SET F001, CONT.
ENXCO



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F001-143

Page 4.8-4. MM FIRE-1 requires cessation of construction during "severe fire weather". enXco requests modification of the measure to require conferral with the local CAL FIRE office upon a "severe fire weather" declaration to determine whether work needs to stop.

F001-144

Section 4.9 Soils and Geology

Page 4.9-1. enXco requests deletion of AM GEO-1 and its replacement with the following language:

AM GEO-1 Design Plan. Project structures shall be built in accordance with the design-basis recommendations in the project-specific geotechnical investigation report. Structure designs must meet the requirements of all applicable federal, state, and county permits and building codes.

enXco also requests corresponding edits to AM GEO-1 references on pages 4.9-4 and 4.9-8 and in the project description.

F001-145

Section 4.10 Energy and Mineral Resources

Page 4.10-2. Please take into consideration that the project has been segretated from mineral entry until at least 30 June 2013 (see comment on page 4.10-3, below).

Page 4.10-3. Please supplement the third paragraph of the page with information regarding BLM's 2-year segregation of the Riverside East SEZ from mineral entry on 30 June 2009 and renewal of same on 30 June 2011. Please also explain that, while the proposed project would be consistent with the Solar Energy Zone, because its Form 299 was filed and accepted by BLM prior to 30 June 2009, the project qualifies as a "pending project" under the terms of the Supplement to the Draft Solar Programmatic EIS and therefore would not be subject to its terms if the PEIS is adopted in its current form.

F001-146

Section 4.11 Lands and Realty

Page 4.11-3. In the "Habitat Conservation Areas" paragraph, please cross-reference Section 4.4 and note that the effect on management of the WHMA as a whole is minimal because, while the proposed project may affect the map depicting the Palen-Ford WHMA boundary, the proposed project does not affect the resources the Palen-Ford WHMA was created to protect (please see our comment on Page 4.4-18, above, for more detail).

F001-147

Page 4.11-8. It is enXco's understanding that the private parcel referenced in the second sentence of the second paragraph of the "Applicable Land Use Plans, Policies, or Regulations" is in fact owned in fee by Riverside County. Please revise accordingly.

COMMENT SET F001, CONT.
ENXCO

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Page 4.11-10. For clarification, please explain in the first paragraph of Section 4.11.12 that the 60-foot extension of Alternative C into the adjacent Chuckwalla DWMA is required solely to accommodate intermittent "wind sway" of overhaning conductors over the DWMA boundary.

F001-148

Page 4.11-18. The cumulative effects analysis of Alternative 4 should take into consideration that a loss of access to lands managed by BLM for multiple-use as a result of energy development projects is not necessarily an adverse effect to lands and realty. Energy development is consistent with the multiple-use mandate of FLPMA, particularly where, as here, the lands in question have already been segregated as part of the proposed Riverside East Solar Energy Zone, which, after being announced in the Federal Register on June 30, 2009 and refined through public comment on both energy and environmental considerations, has been identified as among the BLM-administered lands best suited for solar development based on a series screening criteria. Similarly, the last paragraph of the Alternative 4 analysis should also take into account that most of the project study area is BLM-administered land that (i) is segregated from entry as part of the proposed withdrawal of the Riverside East Solar Energy Zone; and (ii) is subject to the primary land use authority of the federal government, rather than state or local government.

F001-149

Section 4.12 Noise and Vibration

Page 4.12-2. Please consider revising Table 4.12-1 by deleting the "substation column" (which is not a feature of the Desert Harvest project) and by condensing the "Solar Facility" and "Gen-Tie Transmission Line" columns into a single column entitled "Distance to Closest Existing Residence" with the same 6,500-foot value for Alternatives 4 through 6 and the values of 500, 500, 1,450 and 900 feet for Alternatives B through E, respectively. Please also delete the "Alternative A – No Gen-Tie" row from the table.

F001-150

Page 4.12-5. Please consider the following edit to clarify the noise analysis: "Construction noise was modeled for the ~~Desert Sunlight Solar Farm Project for 5 of the 18~~ construction sub-phases:"

F001-151

Page 4.12-12. The first paragraph under "Operation and Maintenance" states that operation and maintenance of the proposed project will require 16 employees. This is incorrect. As stated on page 2-7 of the DEIS, operation and maintenance of the proposed project will require 8 full-time employees.

F001-152

Page 4.12-24. Please change the reference to Alternative "C" in the first sentence of the "Noise from Decommissioning Activities" paragraph to Alternative "B".

F001-153

Page 4.12-40. Please revise the last sentence of the second paragraph of the page to reflect the non-cumulative baseline of the DEIS, under which enXco would construct Alternative B: "Consequently, construction activities would be exempt from the Riverside County noise

F001-154

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ordinance and noise impacts from construction activities along the gen-tie line~~, which would involve stringing only,~~ would be less than significant (CEQA significance criterion NZ-5)." F001-154

Section 4.14 Recreation

Page 4.14-2. The second sentence of the "Indirect Effects" paragraph states that the project would require a peak construction workforce of up to "315" workers. Please revise to "250", consistent with the fourth sentence of the same paragraph and the construction workforce estimates of page 2-12 of the DEIS. F001-155

Page 4.14-3. Without unduly diminishing the importance of wilderness experiences referenced in the "Residual Impacts and Unavoidable Adverse Effects" section of the page, enXco would like to note that only a small number of visitors frequent the portions of Joshua Tree National Park surrounding the Chuckwalla Valley because, as stated in the Draft Solar Programmatic EIS, most facilities and recreational uses are in the western side of the park (Draft Solar PEIS, page 9.4-231). The rugged terrain and isolation of the surrounding mountains from public roads further constrain access. As the NPS has noted, "there are no roads or visitor access points into the park in that area, and the number of visitors to that area, while unknown, are likely to be low." National Park Service, comments on First Solar – Desert Sunlight Solar Farm Project, Draft Environmental Impact Statement (24 November 2010)). Because of their isolation, activities in this portion of JTNP most likely consist primarily of overnight backcountry camping. Backpacking overnight is the least common activity in the park; 2 percent of visitors engage in it, and 5 percent of visitors actually sleep in the backcountry. (National Park Service Social Science Program, Joshua Tree National Park Visitor Study (Spring 2004), pages 21, 25). F001-156

Page 4.14-5. Please delete the inadvertent references to "energy and mineral resources" on the page. F001-157

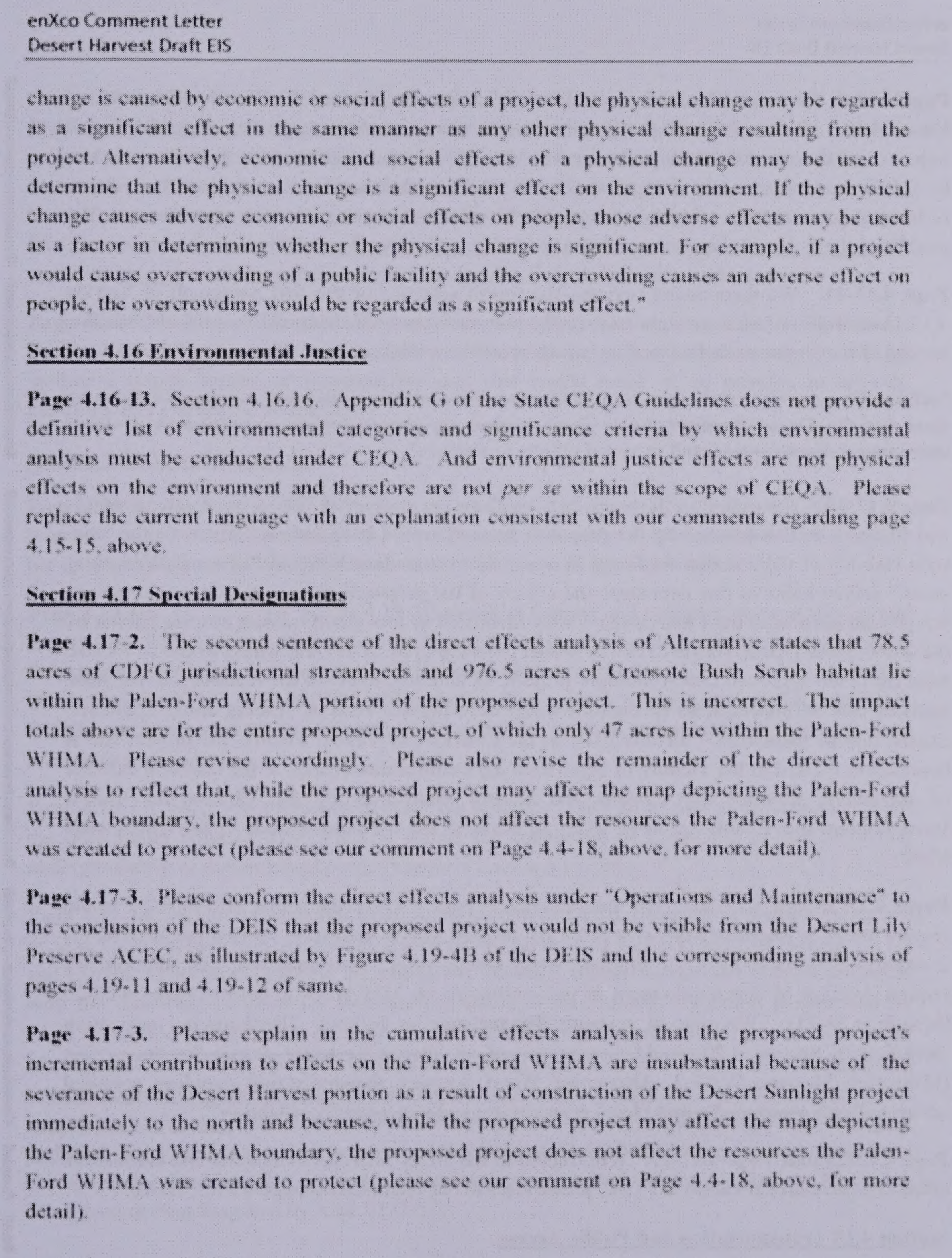
Page 4.14-12. The references to the CDCA in the second full paragraph of the page should be contextualized by explaining that the CDCA is a 25-million acre area of which 10-million acres are administered by BLM under the multiple-use mandate of FLPMA, rather than under the recreational limitations of wilderness and/or national park designations. F001-158

Section 4.15 Social and Economic

Page 4.15-15. Unlike NEPA, CEQA pertains solely to physical effects on the environment. With regard to Section 4.15.16 of the DEIS, please note that 14 CCR 15064 and 15382 provide that social and economic changes *per se* may not be treated as significant effects on the environment under CEQA. As stated in 14 CCR 15064(e): F001-159

"Economic and social changes resulting from a project shall not be treated as significant effects on the environment. Economic or social changes may be used, however, to determine that a physical change shall be regarded as a significant effect on the environment. Where a physical

COMMENT SET F001, CONT.
ENXCO



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change is caused by economic or social effects of a project, the physical change may be regarded as a significant effect in the same manner as any other physical change resulting from the project. Alternatively, economic and social effects of a physical change may be used to determine that the physical change is a significant effect on the environment. If the physical change causes adverse economic or social effects on people, those adverse effects may be used as a factor in determining whether the physical change is significant. For example, if a project would cause overcrowding of a public facility and the overcrowding causes an adverse effect on people, the overcrowding would be regarded as a significant effect."

F001-159 cont.

Section 4.16 Environmental Justice

Page 4.16-13. Section 4.16.16. Appendix G of the State CEQA Guidelines does not provide a definitive list of environmental categories and significance criteria by which environmental analysis must be conducted under CEQA. And environmental justice effects are not physical effects on the environment and therefore are not *per se* within the scope of CEQA. Please replace the current language with an explanation consistent with our comments regarding page 4.15-15, above.

F001-160

Section 4.17 Special Designations

Page 4.17-2. The second sentence of the direct effects analysis of Alternative states that 78.5 acres of CDFG jurisdictional streambeds and 976.5 acres of Creosote Bush Scrub habitat lie within the Palen-Ford WHMA portion of the proposed project. This is incorrect. The impact totals above are for the entire proposed project, of which only 47 acres lie within the Palen-Ford WHMA. Please revise accordingly. Please also revise the remainder of the direct effects analysis to reflect that, while the proposed project may affect the map depicting the Palen-Ford WHMA boundary, the proposed project does not affect the resources the Palen-Ford WHMA was created to protect (please see our comment on Page 4.4-18, above, for more detail).

F001-161

Page 4.17-3. Please conform the direct effects analysis under "Operations and Maintenance" to the conclusion of the DEIS that the proposed project would not be visible from the Desert Lily Preserve ACEC, as illustrated by Figure 4.19-4B of the DEIS and the corresponding analysis of pages 4.19-11 and 4.19-12 of same.

F001-162

Page 4.17-3. Please explain in the cumulative effects analysis that the proposed project's incremental contribution to effects on the Palen-Ford WHMA are insubstantial because of the severance of the Desert Harvest portion as a result of construction of the Desert Sunlight project immediately to the north and because, while the proposed project may affect the map depicting the Palen-Ford WHMA boundary, the proposed project does not affect the resources the Palen-Ford WHMA was created to protect (please see our comment on Page 4.4-18, above, for more detail).

F001-163

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ENXCO

Page 4.17-6. Please conform the conclusions of the first paragraph of the "Residual Impacts and Unavoidable Adverse Effects" paragraph with our comment above regarding page 4.4-18 (no impacts to Palen-Ford WHMA) and page 4.3-36 (regarding the reduction of residual habitat loss by permanent compensatory mitigation offsets), which we believe demonstrate why there are no residual impacts and unavoidable adverse effects with regard to the resources they discuss. The project does not directly impact vegetation resources within the Desert Lily ACEC. F001-164

Page 4.17-11. We recommend revising the fourth sentence of the first paragraph of Section 4.17.11 as follows because it is incorrectly premised upon the cumulative projects baseline instead of the project-specific baseline, which presumes construction of Alternative B by enXco: F001-165

"~~While c~~Construction of the gen-tie would ~~occur concurrently with construction of the gen-tie lines for the Desert Sunlight Solar Farm project on shared towers, construction of these transmission lines would~~ result in visual effects to visitors."

Page 4.17-23. The indirect effects analysis on the page states that "The loss of intermountain and foraging habitat [caused by the proposed project] would have indirect effects to the long-term viability of wildlife that are found in or use the surrounding National Parks and Wilderness areas." enXco believes this overstates the effects of the proposed project, which would occupy 0.6 percent portion of the Chuckwalla Valley identified as low quality desert tortoise habitat by the 2009 USGS Desert Tortoise Habitat Model (Nussear et al. 2009) and which would be located adjacent to the approved Desert Sunlight project. In addition, many of the features that the same analysis lists as impediments to bighorn sheep movement – such as fencing along highways, canals, human habitation – already exist in the Chuckwalla Valley. Finally, the project site is bounded to located in the vicinity of significant agricultural disturbance at the southern extreme of mountains forming the western and eastern boundaries of the Chuckwalla Valley. Intermountain movements are more likely to occur in the northern reaches of the Chuckwalla Valley. F001-166

Pages 4.17-25 and 4.17-26. The last sentence of page 4.17-25 states that MM WAT-2 would require use of an alternate water source for the project. This is incorrect. As drafted, MM WAT-2 requires identification of an alternate water source prior to construction. In addition, we request deletion of that requirement in our comments on MM WAT-2, below (Pages 4.20-20 through 4.20-23). We suggest revising the sentence as follows: "Furthermore, mitigation identified in Section 4.20 ~~would require use of an alternative water source for the project~~ (Mitigation Measure WAT-2, Alternative Water Source)~~,~~ ~~thereby~~ would avoid~~ing~~ potential adverse effects ~~associated with~~ to local groundwater ~~and water~~ supply ~~reliability~~." F001-167

Page 4.17-26 and Page 4.17-27. With regard to the DEIS' analyses of indirect and cumulative effects on recreational values at JTNP, please refer to our comment on page 4.14-3, above. F001-168

Section 4.18 Transportation and Public Access F001-169

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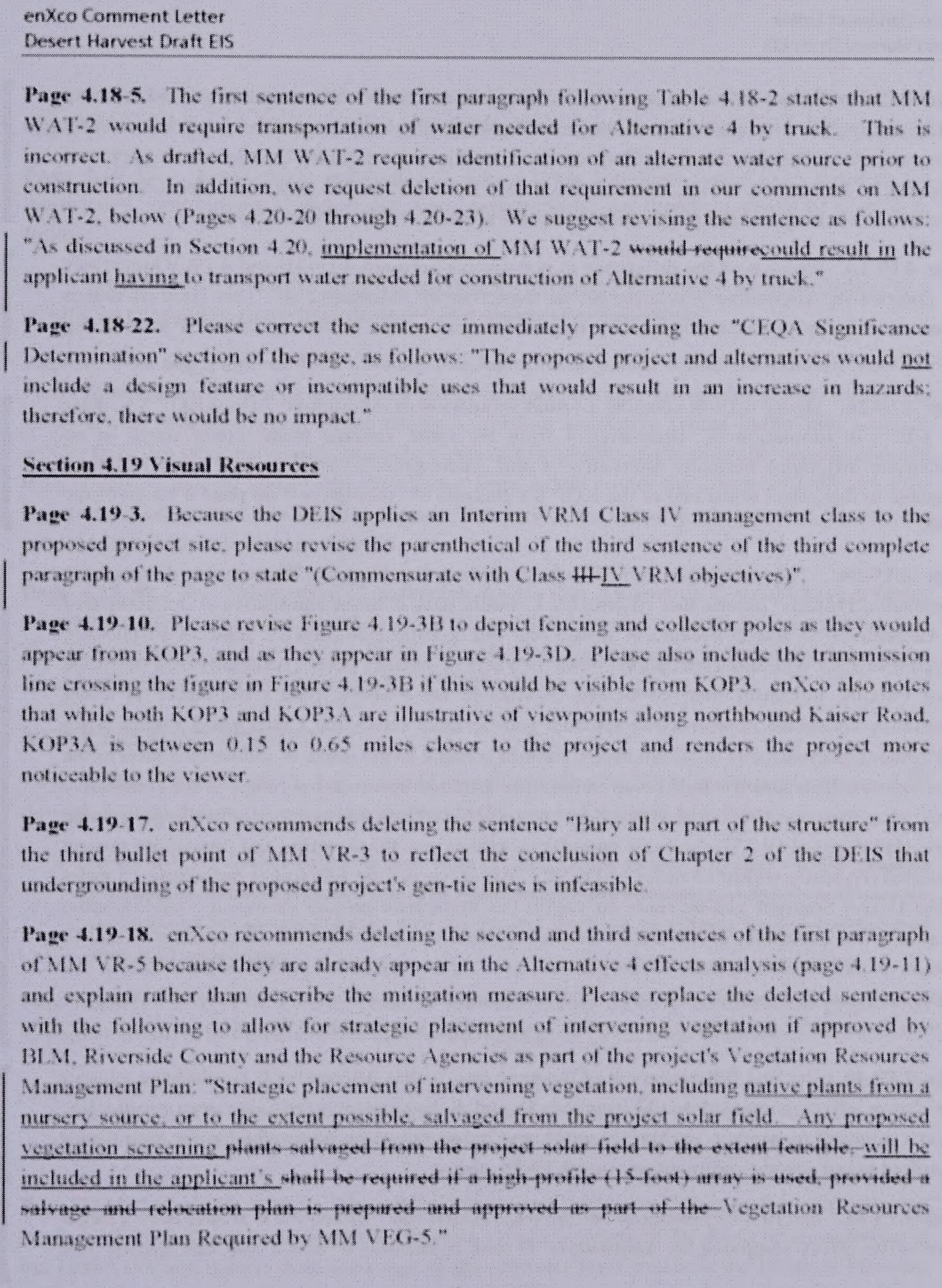
ENXCO



Page 4.18-5. The first sentence of the first paragraph following Table 4.18-2 states that MM WAT-2 would require transportation of water needed for Alternative 4 by truck. This is incorrect. As drafted, MM WAT-2 requires identification of an alternate water source prior to construction. In addition, we request deletion of that requirement in our comments on MM WAT-2, below (Pages 4.20-20 through 4.20-23). We suggest revising the sentence as follows: "As discussed in Section 4.20, implementation of MM WAT-2 ~~would require~~could result in the applicant having to transport water needed for construction of Alternative 4 by truck."

F001-169 cont.

Page 4.18-22. Please correct the sentence immediately preceding the "CEQA Significance Determination" section of the page, as follows: "The proposed project and alternatives would not include a design feature or incompatible uses that would result in an increase in hazards; therefore, there would be no impact."

F001-170

Section 4.19 Visual Resources

Page 4.19-3. Because the DEIS applies an Interim VRM Class IV management class to the proposed project site, please revise the parenthetical of the third sentence of the third complete paragraph of the page to state "(Commensurate with Class ~~III~~ IV VRM objectives)".

F001-171

Page 4.19-10. Please revise Figure 4.19-3B to depict fencing and collector poles as they would appear from KOP3, and as they appear in Figure 4.19-3D. Please also include the transmission line crossing the figure in Figure 4.19-3B if this would be visible from KOP3. enXco also notes that while both KOP3 and KOP3A are illustrative of viewpoints along northbound Kaiser Road, KOP3A is between 0.15 to 0.65 miles closer to the project and renders the project more noticeable to the viewer.

F001-172

Page 4.19-17. enXco recommends deleting the sentence "Bury all or part of the structure" from the third bullet point of MM VR-3 to reflect the conclusion of Chapter 2 of the DEIS that undergrounding of the proposed project's gen-tie lines is infeasible.

F001-173

Page 4.19-18. enXco recommends deleting the second and third sentences of the first paragraph of MM VR-5 because they are already appear in the Alternative 4 effects analysis (page 4.19-11) and explain rather than describe the mitigation measure. Please replace the deleted sentences with the following to allow for strategic placement of intervening vegetation if approved by BLM, Riverside County and the Resource Agencies as part of the project's Vegetation Resources Management Plan: "Strategic placement of intervening vegetation, including native plants from a nursery source, or to the extent possible, salvaged from the project solar field. Any proposed vegetation screening ~~plants salvaged from the project solar field to the extent feasible,~~ will be included in the applicant's ~~shall be required if a high-profile (15-foot) array is used, provided a salvage and relocation plan is prepared and approved as part of the~~ Vegetation Resources Management Plan Required by MM VEG-5."

F001-174

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ENXCO

Page 4.19-19. Please delete the parenthetical requirement for on-demand, audio-visual warning system mitigation in clause "c)" of the central paragraph of the page. The FAA has not yet incorporated AVWS into its Part 77 obstruction marking and lighting circular as an approved technology, and, in any event, it is the FAA, not the BLM or the applicant, that determines appropriate marking and lighting arrangements for projects within its Part 77 purview. F001-175

Page 4.19-24. Please note the difference in perspective between 4.19-3B and 4.19-3D increases the contrast of Alternative 7 relative to the depiction of Alternative 4. This contrast makes Alternative 7 appear disproportionately larger and reduces the screening effect of intervening vegetation. F001-176

Page 4.19-26. Figure 4.19-8D depicts a visual simulation of Alternative 7 from KOP 8A along the I-10. A simulation of Alternative 4 from the same vantage point would result in no discernible difference between Alternative 4 and Alternative 7. enXco requests inclusion of language to this effect at the end of the KOP 8A analysis of Alternative 7 on page 4.19-26 of the DEIS. F001-177

Page 4.19-38. The paragraph immediately preceding the heading "Reasonably Foreseeable Cumulative Projects" asserts that Alternative C would have a larger cumulative effect compared to Alternatives D and E because it would site one gen-tie line directly adjacent to another. enXco disagrees with this conclusion. While two sets of parallel poles (Alternative C) would be more visually impactful than co-located conductors on a single pole (Alternative B under cumulative conditions) constructing separate gen-tie lines across the Chuckwalla Valley along new routes (Alternative D or Alternative E) would create a larger sense of industrialization in the local viewshed because it would result in multiple installed transmission routes at the cumulative level rather than one. As noted in the Local cumulative effects discussion within the geographic scope [DEIS pg. 4.19-37], the local cumulative effects are those within the immediate project viewshed (typically within 15 miles of DHSP). All of the gen-tie line routes are within 15 miles of the Desert Sunlight gen-tie route so within the immediate project viewshed. Additionally, because of the proximity of the Desert Sunlight gen-tie line route and the Alternatives D and E, viewers would likely see both of the gen-ties over a more extended period of time than if the routes are parallel, especially viewers travelling along the I-10 who would be parallel to the gen-tie lines B and E for an additional two miles compared with gen-tie lines B and C. F001-178

Page 4.19-40. The first full paragraph of the page asserts that Alternative C would have a larger cumulative effect compared to Alternatives D and E because it would site one gen-tie line directly adjacent to another. enXco disagrees and draws the opposite conclusion for the reasons described in our second comment on page 4.19-38, above. F001-179

Page 4.19-41. The first full paragraph of the page asserts that Alternative C would have a larger cumulative effect compared to Alternatives D and E because it would site one gen-tie line F001-180

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ENXCO

directly adjacent to another. enXco disagrees and draws the opposite conclusion for the reasons described in our second comment on page 4.19-38, above. F001-180 cont.

Page 4.19-42. Significance criterion V-7 sets a lower threshold than CEQA requires for incremental contributions to significant cumulative impacts, and therefore should be revised as follows: F001-181

V-7 The presence of DHSP would constitute a cumulatively considerable contribution to a significant cumulative visual impact~~add to a cumulative visual alteration~~.

Page 4.19-44 and Page 4.19-45. Stating that high-profile panels would substantially degrade views from Kaiser Road with a 200 foot buffer in place, but that low-profile panels would not, draws a very fine distinction. After taking a 200-foot vegetative screen buffer into account, enXco feels that close-proximity, at-grade views of low-profile and high-profile panels, coupled with effects of fencing and overhead collector lines would render the effects of both less than significant, under the "substantially degrade" standard of significance criterion V-3, for reasons stated in our comments on page 4.19-24. F001-182

Page 4.19-48. The "Alternative C" paragraph asserts that Alternative C would have a larger cumulative effect compared to Alternatives D and E because it would site one gen-tie line directly adjacent to another. enXco disagrees and draws the opposite conclusion for the reasons described in our second comment on page 4.19-28, above. F001-183

Section 4.20 Water Resources F001-184

Page 4.20-5. If MM WAT-2 is retained notwithstanding enXco's comment on pages 4.20 through 4.20-23, below, please revise the first bullet point of the page as follows:

- MM WAT-2 (Alternative Water Source and Groundwater Offsets) would ~~address potential drawdown effects by avoiding pumping or over-pumping at the project's supply well(s), and by ensuring~~ ensure that the project does not perpetuate ~~known or predicted~~ overdraft conditions.

Page 4.20-7. If MM WAT-2 is retained notwithstanding enXco's comment on pages 4.20 through 4.20-23, below please revise the second bullet point of the page as follows: F001-185

- MM WAT-2 (Alternative Water Source and Groundwater Offsets) would ~~avoiding pumping or over-pumping at the project's supply well(s), and~~ ensure that the project does not perpetuate ~~known or predicted~~ overdraft conditions.

Pages 4.20-7 through 4.20-8. The DEIS's analysis of potential Colorado River Accounting Surface effects is based on an analysis that used a rough estimate of the depth of groundwater at the DHSP site and ignores both the range of groundwater level trends in the Hayfield Planning F001-186

COMMENT SET F001, CONT.
ENXCO

F001-186

area and the existing and readily available well data in the vicinity of the DHSP that tracks groundwater levels. Instead, it infers a rough estimate of static groundwater levels to conclude that project wells could draw down as low as within four feet of the Accounting Surface to obtain water. The DEIS reaches this conclusion by using Google Earth to estimate elevation levels for the project site and subtracting from those elevations a groundwater level estimate for the Hayfield Planning Area (which is twice as large as CVGB) of 1-400 feet below ground surface. The Desert Sunlight FEIS used existing well data to show that static groundwater levels for wells in the Chuckwalla valley are in fact between 241 and 266 feet above the Colorado River Accounting Surface of 238 to 240 amsl (*See*, Desert Sunlight FEIS, Pages 4.17-10 through 4.17-11 and Appendix O of same, attached hereto). The Desert Sunlight FEIS estimated that Desert Sunlight groundwater pumping of 650-700 afy for two years would result in a drawdown of 10-20 feet, which is still more than 200 feet above the Colorado River Accounting Surface. *Id.* Desert Harvest will pump 400-500 afy for two years, resulting in a proportionately similar drawdown effect of more than 200 feet above the Colorado River Accounting Surface. The effects of the proposed project on Colorado River water therefore would not be significant.

enXco requests that the DEIS analysis be revised to incorporate the existing well data as suggested below, which uses the best available data, to indicate that the groundwater level elevation at the DHSP site is well above the Colorado River Accounting Surface and, as such, no impact to the Colorado River Accounting Surface would occur.

Accordingly, enXco recommends revising pages 4.20-7 through 4.20-8 as follows:

Colorado River Water. As discussed in Section 3.20 (see "Colorado River Accounting Surface"), groundwater pumped from the CVGB at or below an elevation of 234 feet amsl can be considered recharge from the adjudicated Colorado River~~is considered Colorado River water~~. According to the Colorado River Board of California (CRBC), municipal, industrial, and recreational water users found to be using Colorado River water, through Accounting Surface delineations, without a Colorado River water right may be eligible to contract for water from the Lower Colorado Water Supply Project (CRBC 2000). Also as described by the CRBC, if a well or pump extends into the Accounting Surface for the purpose of extracting water, then a valid water contract is required from the Secretary of the Interior, through its agent, the Bureau of Reclamation (CRBC 2003).

The discussion presented under "Groundwater Level Trends" in Section 3.20 indicates that groundwater levels in the Hayfield Planning area, including the CVGB and the project site, range from the ground surface to 400 feet below ground surface (bgs). ~~Google Earth (2011) indicates that ground surface elevation at the project site ranges from approximately 670 feet amsl in the northwest to approximately 500 feet amsl in the southeast. As such, depth to groundwater on the project site may be up to 190 to 270 feet amsl. For the purposes of this effects discussion, depth to groundwater is assumed to be 230 feet amsl (the average of 190 and 270), approximately four feet above the Colorado River Accounting Surface.~~

COMMENT SET F001, CONT.
ENXCO

F001-186 cont.

Available well data in the vicinity of the DHSP site indicates the groundwater elevation has been measured between 385 and 504 feet amsl, with the water level data for wells that are most proximal to the DHSP site, ranging between 483 and 488 feet amsl (AECOM 2011). A review of cross sections and potentiometric maps from prior investigations of the Upper Chuckwalla Valley show that the water level elevation has been interpreted to be between 500 to 540 feet amsl in the area of the DHSP site. The water level data from the wells and used in the interpretation of the potentiometric surface were collected between 1961 and 1992.

Data from a well in the community of Desert Center (5S/16E-7P01, 7P02), located about 3 miles south of the DHSP site, show similar water level elevations to those measured near the DHSP project in the early 1960s. The well (5S/16E-7P01, 7P02) data then show a period of water level decline in the mid-1980s as a result of expanded agricultural operations, where combined pumping exceeded 20,000 acre-feet per year, well above historical water usage for the western part of the basin. Agricultural operations were curtailed in the late 1980s and water levels in the Desert Center area have recovered to levels similar to the early 1960s. The most recent water level elevation measured (2000) in Well 5S/16E-17P02 was 462 feet amsl or about 230 feet above the proposed Accounting Surface.

The DWR reported in the latest Bulletin 118 Update (2004) that the upper 100 feet of saturated sediments in the CVGB are estimated to have approximately 900,000 acre-feet of groundwater in storage, as based on the 1975 version of DWR Bulletin 118 (DWR 2004). ~~Based on this 1975 estimation, the upper four feet of saturated sediments between the assumed water surface elevation of 230 feet amsl (noted above) and the Colorado River Accounting Surface could potentially contain 36,000 acre-feet of water, assuming 900,000 acre-feet in the upper 100 feet, divided by 100 feet, then multiplied by four feet (SCE 2010).~~ These estimates suggest that there is sufficient groundwater in storage above the Colorado River Accounting Surface to meet the project's construction water requirements of 400.51 to 500.51 afy.

If all water required for construction of the project is pumped from saturated sediments above the Colorado River Accounting Surface, it could be concluded that the project would not consume any appropriated Colorado River water. However, the estimates of groundwater storage described above are based on DWR data from 1975 (DWR 2004), and do not consider uses of the CVGB water which have developed in the 35 years since then and would affect the volume of water in storage, both above and below the Colorado River Accounting Surface. The calculations described above also assume that groundwater stored in the upper 100 feet of saturated sediments is distributed evenly~~, and that the volume in storage within a four-foot section of these sediments can been directly extrapolated from the overall storage~~.

The assumptions described above are problematic compared to current understanding of subsurface conditions in the project area. Environmental analysis of the Genesis Solar Energy project, which is also located within the CVGB, included preparation of hydrostratigraphic cross-sections, or diagrams/maps of subsurface materials which form distinct hydrologic units with

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respect to the movement of groundwater. These cross-sections indicate varying sub-surface conditions relevant to grain size and static groundwater levels (CEC 2010; see pages 944-946 of 1380: *Soil and Water Figures 8, Hydrostratigraphic Cross-Section A-A', 9, Hydrostratigraphic Cross-Section B-B'*, and *10, Hydrostratigraphic Cross-Section Lines*). It is plausible that the volume of water in storage within the saturated sediments above the estimated Colorado River Accounting Surface, and the distribution or availability of water stored in saturated sediments are less than indicated by the estimates described above~~; it is also plausible that the proposed groundwater well at the project site could result in pumping of Colorado River water by drawing water from below 234 feet amsl. Therefore, mitigation is required to avoid potential effects associated with use of appropriated Colorado River water~~.

The comparison of available historical and recent groundwater level data from wells in the vicinity of the DHSP site and prior interpretations of the water level elevation below the DHSP site reveal that the static water level elevation in the area is well above the proposed Accounting Surface. A buffer of more than 200 feet is indicated in the groundwater level data. The data indicate that the DHSP therefore would not affect the Accounting Surface.

~~Construction of the project would include implementation of Mitigation Measure WAT-7, which is presented under the "Mitigation Measures" subheading and summarized below, as relevant to use of appropriated Colorado River water.~~

~~MM WAT-7 (Colorado River Water Supply Plan) would ensure that if the project results in pumping of any Colorado River water, conservation actions would be implemented to "replace" the Colorado River water on an acre-foot by acre-foot basis.~~

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Page 4.20-18. Please note that decommissioning of the proposed project would likely require substantially less water than construction.

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Pages 4.20-20 through 4.20-23. MM WAT-2 would require enXco to contractually secure, prior to construction, an out-of-basin water source or in-basin offsets on a one-to-one basis for all water required by the project during each year of overdraft conditions projected by the DEIS. We question the need for this measure. As stated on pages 4.20-5 and 4.20-15 of the DEIS, sufficient groundwater supply is available in the Chuckwalla Valley Groundwater Basin (CVGB) to meet project requirements, and even if construction resulted in overdraft conditions, such effects would be temporary and would be expected to reverse once construction ceased. In addition, the project's incremental contribution to projected, worst-case cumulative overdraft conditions is inconsiderable. The project's water demand during construction would be roughly 2 percent of basin-wide outflow. Operational water demand would be roughly 0.1 percent of basin-wide outflow through 2017, and 0.2 percent of basin-wide outflow thereafter. While small incremental contributions can have cumulatively considerable effects, the DEIS shows that these particular project contributions would not force CVGB past an overdraft "tipping point" it otherwise would not have reached. The Desert Sunlight EIS applied the same reasoning to

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determine that the Desert Sunlight project's contribution to cumulative ground-water basin impacts was cumulatively inconsiderable (Desert Sunlight FEIS, page 4.17-41). Finally, as stated on page 4.20-7 of the DEIS, the Water Supply Assessment prepared for the project shows that overdraft conditions would occur regardless of the project and would recover over the lifetime of the project, such that overdraft conditions in the CVGB are anticipated to be temporary.

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However, if BLM decides to retain MM WAT-2, enXco recommends revising the measure to reflect the following:

First, while impact analysis and mitigation should be based on worst-case projections, the trigger for implementing mitigation should be tied to actual, rather than projected overdraft conditions because the likelihood and extent of actual overdraft is hard to predict. As a practical matter, many of the projects factored into the cumulative impacts analysis may or may not be constructed, and, if they are constructed, may not be constructed on the estimated schedule provided in the DEIS. The Palen and Blythe projects are subject to bankruptcy proceedings and may be re-authorized for less water-consumptive solar technologies, for example, while the Eagle Crest pumped storage project – which alone would cause CVGB overdraft – faces continued discussion regarding site control and potentially further environmental review regarding biological and water resources concerns. Adjusting the measure's trigger to actual rather than projected conditions ensures that the mitigation is reasonably related to the project's impacts.

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Second, with the exception of federal reserved water rights, BLM's rights to groundwater are subject to state law.[2] Under California law, the groundwater rights of all overlying owners in a basin are correlative. That is, when the basin is overdrafted, overlying owners are limited to their proportionate fair share based upon their reasonable needs, regardless of priority, with the total amount available generally being limited to safe-yield. Thus, an out-of-basin water source or in-basin offset is only required to the extent an overlying pumper desires to exceed its correlative

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[2] FLPMA authorizes a wide range of land management uses that require the use of water, but FLPMA does not give an independent statutory basis for federal water rights inconsistent with state law. Section 43 USC 1701(g), see 88 Interior Dec. 253 (D.O.I.), 257-58, 1981 WL 143135 (D.O.I.), 4. Under California law, riparian water rights exist on federal lands located within the State of California. In re Water of Hallett Creek Stream System (1988) 44 Cal.3d 448, 467 [243 Cal.Rptr. 887, 898, 749 P.2d 324, 334]. With regard to groundwater rights, "The overlying owner in this state has been held to have analogous rights to those of a riparian ... subject to the same restrictions as those applicable to riparian owners." Tulare Irr. Dist. v. Lindsay-Strathmore Irr. Dist. (1935) 3 Cal.2d 489, 525 [45 P.2d 972, 986]; City of Pasadena v. City of Alhambra (1949) 33 Cal.2d 908, 926 [207 P.2d 17, 29]. "As between overlying owners, the rights, like those of riparians, are correlative; each may use only his reasonable share when water is insufficient to meet the needs of all [citation]." City of Barstow v. Mojave Water Agency (1998) 64 Cal.App.4th 737 [75 Cal.Rptr.2d 477, 486] review granted and opinion superseded, (Cal. 1998) 78 Cal.Rptr.2d 184 and aff'd in part, rev'd in part, (2000) 23 Cal.4th 1224 [99 Cal.Rptr.2d 294]." Therefore, in California, BLM's groundwater rights as an overlying owner are subject to the correlative rights principle.

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share during overdraft conditions. We urge incorporation of the correlative principle into MM WAT-2 to ensure that the Desert Harvest project does not disproportionately bear a burden that must be borne by all overlying pumpers within the CVGB, regardless of priority. Doing so on a larger scale would ensure that BLM's authorized uses correspond with state law. F001-190

Third, requiring enXco to identify and contractually secure out of basin water rights prior to project construction imposes a substantial, multi-agency burden of considerable financial, practical and transactional consequences that may be unnecessary, depending on real-time cumulative conditions. State law already requires an overlying pumper to seek an out-of-basin source to the extent it exceeds its correlative share without a corresponding in-basin offset. In addition, the requirements of MM WAT-2 (if modified as requested) and the exemption from MM WAT-3 and MM WAT-7 for exclusive use of out-of-basin water sources provide sufficient incentives for a water source other than CVGB. F001-191

Finally, we recommend inclusion of an off-set option involving recharge of the CVGB through use of MWD's existing Hayfield Lake Chuckwalla Valley Groundwater Conjunctive Use Project facilities. Use of the existing facilities would not present new impacts beyond those already identified in the DEIS because the Desert Harvest recharge water would not be subject to conjunctive use (i.e., would not be withdrawn from the CVGB) and MWD water quality standards would have to be met as a condition of using MWD infrastructure. It should be noted that the Hayfield Lake portion of the conjunctive use facilities is located in the Hayfield Valley, which is part of the eastern portion of the Orocopia Valley Groundwater Basin that drains into Hayfield Lake and the Chuckwalla Valley (DWR, 2004. California's Groundwater Bulletin 118: Hydrologic Region Colorado River). The DEIS identifies the Orocopia Valley Groundwater Basin as source of underground water inflow to the CVGB (Pages 3.20-17, 3.20-18, 3.20-20). F001-192

Our suggested edits to MM WAT-2 reflecting the comments above are as follows:

MM WAT-2 **Alternative Water Source and Groundwater Offsets.** ~~Prior to the onset of construction, the Applicant shall identify a water source alternative to the Chuckwalla Valley Groundwater Basin (CVGB) for some or all of the water required for construction, operation, and decommissioning of the project. The alternative water source may be any source other than the CVGB. If a viable alternative water source is identified, the Applicant shall verify in writing to the BLM that sufficient water supply is available from the alternative source to meet the project's needs. Any water used for the construction, operation, maintenance, or remediation of the project shall be solely for the beneficial use of the renewable energy project or its mitigation measures, as specified in the approved Plan of Development.~~

Water use shall be restricted to pre-construction, construction, operation and decommissioning of the Desert Harvest project and shall cease at the conclusion of the project. If groundwater from the Chuckwalla Valley Groundwater Basin (CVGB) ~~water~~ is to be used to meet any of the project's water supply require-

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ments, the Applicant shall not pump CVGB groundwater in excess of its correlative share as an overlying use during any year that the CVGB is determined to be in overdraft, unless the applicant offsets any excess pumping on an acre-foot per acre-foot basis ~~identify groundwater offsets for the project's share of groundwater pumping on an acre foot per acre foot basis during any year that the CVGB is projected to be in overdraft~~. The Applicant may secure an equivalent amount of water from a source other than the CVGB as an alternative to an in-basin offset.

Overdraft conditions shall be determined by adjusting the current and future pumping assumptions~~,~~ ~~as defined in~~ of Table 4.20-5 (Estimated Cumulative Budget for the Chuckwalla Valley Groundwater Basin (afy)) of this EIS ~~and assessed in the Water Supply Assessment included as Appendix E~~to reflect actual pumping rates on a quarterly basis from issuance of the ROW grant through project construction and on an annual basis thereafter. ~~The project owner may elect to provide alternative groundwater overdraft projections upon which to rely, in which case a complete Water Supply Assessment including all necessary modeling assumptions in accordance with Senate Bill 610 shall be submitted to the BLM and reviewed and approved by the BLM hydrologist~~.

~~As determined in the Water Supply Assessment for the proposed project, overdraft conditions in the CVGB are anticipated to occur during each year of project operations, projected through 2043, to varying degrees of severity and decreasing over time. The anticipated overdraft conditions are projected to occur regardless of the DHSP, as the project's maximum operational pumping requirement is 39 afy, while the negative groundwater budget projections exceed 39 afy during each year. However, in order to ensure that the proposed project does not contribute to overdraft conditions, during each year that overdraft conditions are anticipated to occur t~~If the offset requirement of this measure is triggered, the Applicant shall implement one or more in-basin offset ~~the~~ measures, including but not limited to, those listed below, and verify in an annual report to the BLM that an amount of groundwater equal to that consumed by the project in excess of its correlative share ~~i~~s ~~conserved~~ offset within the CVGB on an acre-foot per acre-foot basis.

Implement a Forbearance and Fallowing Program, wherein the Applicant enters into a contractual agreement with willing land owner(s) and/or lessee(s) to fallow fields which are actively irrigated. The contract shall specify the duration of fallowing, during which time no water may be applied to the contracted field. Each field which is fallowed under this program must be located within the CVGB and must receive its water supply from the CVGB. The land owner(s) and/or lessee(s) involved cannot be simultaneously contracting with another entity to fallow the same fields, unless agreed upon by all parties.

Participate in a Forbearance and Fallowing Program implemented within the CVGB by another entity, such as but not limited to the following: Metropolitan Water District (MWD), Palo Verde Irrigation District (PVID), Imperial Irrigation District (IID), and/or other water districts in the project area. Each field which is

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fallowed through a collaborative effort towards the purpose of satisfying this mitigation measure must be located within the CVGB and must receive its water supply from the CVGB.

Explore options with MWD for sale and in-situ or physical delivery of water from existing facilities (e.g., conjunctive use facilities) as a conduit to recharge the CVGB with non-CVGB water contracted by the Applicant, provided the requirements of MM-WAT-1 and MWD's water quality standards are met and hydrological connectivity is demonstrated to the satisfaction of the Environmental Monitor or BLM. In no event shall such recharge water be withdrawn from the CVGB.

In order to satisfy the purpose of this measure, the Applicant must provide documentation to the BLM which verifies that the same quantity of CVGB water which is consumed by the proposed project during an overdraft year in excess of its correlative share is also ~~conserved~~ offset on an acre-foot per acre-foot basis~~, or that the project would not pump CVGB water during overdraft years~~. This documentation shall be provided by the Applicant to the BLM for each year that overdraft conditions are ~~projected~~ determined to occur. The Environmental Monitor or BLM project manager shall verify that ~~the alternative water source is secured via contract prior to the onset of construction and/or that~~ groundwater offsets are secured and implemented if CVGB water is to be used for any portion of the project's water supply requirements in excess of the Applicant's correlative share, per the requirements described above.

If water pumped from the CVGB would be used in conjunction with an alternative water source, the Environmental Monitor shall verify that all groundwater monitoring and reporting requirements identified in MM WAT-3 (Groundwater Drawdown Monitoring and Reporting Plan) and MM WAT-7 (Colorado River Water Supply Plan) are implemented; however, if an alternative water source would be used to meet all of the project's water requirements and the project does not pump any groundwater from the CVGB, or any basin tributary to the CVGB, then MM WAT-3 and MM WAT-7 would not be necessary.

Potential impacts associated with the delivery of an off-site water source to the proposed DHSP site could include effects to transportation and public access, noise, air quality, energy and minerals, and climate change. The daily water demand during construction of the project is estimated to range from a low of 125,000 gallons per day (gpd) to a peak of an estimated 600,000 gpd. Assuming the project used ~~of~~ 12,000 gallon trucks to transport the water, between 10 and 50 round trip truck trips would be required to transport the water to the site each day during construction if all the water consumed during construction were trucked from offsite. During operations, the project would use between 26 and 39 afy. This would require between 2 to 3 round trip truck trips per day, if ~~the CVGB were in overdraft and~~ all the water consumed during a year of operation were trucked from offsite.

[...]

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Pages 4.20-23 through 4.20-25. MM WAT-3 would require enXco to prepare a Groundwater Drawdown Monitoring and Reporting Plan. We recommend revising the well-owner mitigation provisions of MM WAT-3to mirror the well-owner mitigation provisions of the Desert Sunlight FEIS, which anticipate potential cumulative well effects and specify mitigation approaches in greater detail. Doing so will also facilitate coordination of any mitigation cost-sharing between neighboring projects.

Our suggested edits to MM WAT-3 reflecting the comments above are as follows:

MM WAT-3 **Groundwater Drawdown Monitoring and Reporting Plan.** If groundwater is to be pumped for consumptive use in this project from either an onsite well or an offsite well that extracts water from the CVGB, the Applicant shall develop and implement a Groundwater Monitoring and Reporting Plan prior to the onset of construction of the project. In the preparation and implementation of this plan, the Applicant shall coordinate with the BLM and with the Colorado River Basin RWQCB. The Groundwater Monitoring and Reporting Plan shall be prepared by a qualified hydrogeologist and submitted by the Applicant to the BLM for approval, and to the RWQCB for review and comment.

The Groundwater Monitoring and Reporting Plan shall provide detailed methodology for monitoring background and site groundwater levels, water quality, and flow. Monitoring shall be performed during pre-construction, construction, and operation of the project, with the intent to establish pre-construction and project-related groundwater level and water quality trends that can be quantitatively compared against observed and simulated trends near the project pumping wells and near potentially impacted existing private wells. The monitoring wells shall include locations up-gradient, lateral, and down-gradient of all project supply wells and a minimum of three off-site down-gradient wells. Water quality monitoring shall include annual sampling and testing for Total Dissolved Solids (TDS), which include minerals, salts, and metals dissolved in water. Water quality samples shall be drawn from project supply wells, one up-gradient well, and a minimum of two down-gradient offsite wells.

The Groundwater Monitoring and Reporting Plan shall include a schedule for submittal of quarterly data reports by the Applicant to the BLM, for the duration of the construction period. These quarterly data reports shall be prepared and submitted to the BLM for review and approval, and shall include water level monitoring data (trend analyses) from all monitoring wells, including the up-gradient, lateral, and down-gradient wells described above.

Based on the results of the quarterly reports, the Applicant and the BLM shall determine if the project's pumping activities have resulted in water level decline ~~of five feet or more below the baseline trend~~ at any of the monitoring wells, including nearby private wells. If water levels have been lowered more than five feet below immediate pre-construction levels, and monitoring data provided by the Project owner show these water level changes are different from background trends (including prior projects) and are caused by Project pumping, then the Project owner shall provide mitigation to the impacted well owner or owners. Mitigation shall be provided to the impacted well owners that experience five feet

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or more of Project-induced drawdown if the CPM's inspection of the well monitoring data confirms changes to water levels and water level trends relative to measured pre-Project water levels, and the well (private owner's well in question) yield or performance has been significantly affected by Project pumping. The type and extent of mitigation shall be determined by the amount of water level decline induced by the Project on a pro-rata basis, the type of impact, and site-specific well construction and water use characteristics. If an impact is determined to be caused by drawdown from more than one source, the level of mitigation provided shall be proportional to the amount of drawdown induced by the Project relative to other sources. To be eligible, a well owner must provide documentation of the well location and construction, including pump intake depth, and that the well was constructed and usable before Project pumping was initiated. The mitigation of impacts shall be determined as follows:

a. If groundwater monitoring data indicate Project pumping has lowered water levels below the top of the well screen, and the well yield is shown to have decreased by 10 percent or more of the pre-Project average seasonal yield, compensation shall be provided for the diagnosis and maintenance to treat and remove encrustation from the well screen. Reimbursement shall be provided at an amount equal to the customary local cost of performing the necessary diagnosis and maintenance for well screen encrustation. If with treatment the well yield is incapable of meeting 110 percent of the well owner's maximum daily demand, dry season demand, or annual demand, the well owner should be compensated by reimbursement or well replacement.

b. If Project pumping has lowered water levels to significantly affect well yield so that it can no longer meet its intended purpose, causes the well to go dry, or causes casing collapse, payment or reimbursement of an amount equal to the cost of deepening or replacing the well shall be provided to accommodate these effects. Payment or reimbursement shall be at an amount equal to the customary local cost of deepening the existing well or constructing a new well of comparable design and yield (only deeper). The demand for water, which determines the required well yield, shall be determined on a per-well basis using well owner interviews and field verification of property conditions and water requirements compiled as part of the pre-Project well reconnaissance. Well yield shall be considered significantly impacted if it is incapable of meeting 110 percent of the well owner's maximum daily demand, dry-season demand, or annual demand – assuming the pre-Project well yield documented by the initial well reconnaissance met or exceeded these yield levels.

c. Pump lowering – In the event that groundwater is lowered as a result of Project pumping to an extent where pumps are exposed but well screens remain submerged, the pumps shall be lowered to maintain production in the well. The Project shall reimburse the impacted well owner for the costs associated with lowering pumps.

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d. Deepening of wells – If the groundwater is lowered enough as a result of Project pumping that well screens or pump intakes are exposed, and pump lowering is not an option, such affected wells shall be deepened or new wells constructed. The Project owner shall reimburse the impacted well owner for all costs associated with deepening existing wells or constructing new wells.

~~If drawdown of five feet or more occurs at off-site wells, the Applicant shall immediately reduce groundwater pumping until water levels stabilize or recover, sustaining drawdown of less than five feet. Alternatively, the Applicant shall provide compensation to the well owner, including reimbursement of increased energy costs, or deepening the well or pump setting.~~

The Groundwater Monitoring and Reporting Plan shall also include a schedule for submittal of annual data reports by the Applicant to the BLM, for the first five years of the project (including the construction period). These annual data reports shall be prepared and submitted to the BLM for review and approval, and shall include at a minimum the following information:

- Daily usage, monthly range, and monthly average of daily water usage in gallons per day;
- Total water used on a monthly and annual basis in acre-feet; summary of all water level data; and
- Identification of trends that indicate potential for off-site wells to experience deterioration of water level.

The BLM shall determine whether groundwater wells surrounding the project site and project supply well(s) are affected by project activities in a way that requires additional mitigation and, if so, shall determine what measures are needed. After the first five years of the project, the Applicant and the BLM shall jointly evaluate the effectiveness of the Groundwater Monitoring and Reporting Plan and determine if monitoring frequencies or procedures should be revised or eliminated.

The siting, construction, operation, maintenance, and remediation of any groundwater well associated with the project shall conform to specifications contained in the California Department of Water Resources Bulletins #74-81 and #74-90.

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Pages 4.20-27 through 4.20-28. MM WAT-7 would require enXco to secure Colorado River Water offsets prior to groundwater pumping and to implement those offsets in the event project-related groundwater pumping draws water from below a Colorado River Accounting Surface of 234 amsl. As drafted, the measure would unduly burden enXco by requiring legal entitlement to water offsets and offset-specific details even if the groundwater wells used by the Desert Harvest project never reach the Colorado River Accounting Surface. This imposes a substantial, multi-agency burden of considerable financial, practical and transactional consequences that is highly unlikely to be implemented because actual well data shows that the effects of the proposed project on Colorado River water would not be significant, as described above in our comments on pages 4.20-7 through 4.20-8 of the DEIS. enXco therefore requests deletion of MM WAT-7.

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However, if BLM nonetheless elects to retain MM WAT-7, we suggest modifying it to mirror applicable law, which, as the DEIS itself observes (Page 4.20-7), prohibits the consumptive use of Colorado River Groundwater without prior entitlements. This could be achieved by revising MM WAT-7 to indicate that, if the results of MM WAT-3 indicate project-related wells are drawing down below the Colorado River Water Accounting Surface, then enXco must either (i) curtail pumping to the extent required to nullify its contribution to drawdown below the Colorado River Accounting Surface; or (ii) prepare and implement a Colorado Water Supply Plan as outlined in the mitigation measure.

Our suggested edits to MM WAT-2 reflecting the comments above are as follows:

MM WAT-7 **Colorado River Water Supply Plan.** ~~The Applicant shall prepare a Colorado River Water Supply Plan and submit this Plan to the BLM and the Colorado River Basin RWQCB for review and approval prior to the onset of groundwater pumping for the project. The purpose of the Colorado River Water Supply Plan is to ensure that if the project consumes any Colorado River water, an equal amount of water will be "replaced" within the watershed through the implementation of conservation actions.~~

The Colorado River Accounting Surface has been identified at 234 feet above mean sea level (amsl) in the project area. If the groundwater monitoring activities and quarterly data reports required in compliance with MM WAT-3 (Groundwater Drawdown Monitoring and Reporting Plan) indicate that project-related groundwater pumping is about to draw~~s~~ water from below 234 feet amsl, the Applicant shall record the quantity of any groundwater pumped from below 234 feet amsl and shall curtail project-related groundwater pumping to avoid drawing water from below 234 feet until the Applicant prepares a Colorado River Water Supply Plan, submits the plan to the BLM and the Colorado River Basin RWQCB for review and approval, and implements activities pursuant to the plan which result in the conservation of water in an amount equal to the amount of water pumped from below 234 feet amsl.

The Colorado River Water Supply Plan must include the following information:

- Identification of water offset activities and associated water source(s) to replace the quantity of water diverted from the Colorado River over the life of the project on an acre foot per acre foot basis;
- Demonstration of how water diverted from the Colorado River will be replaced for each identified activity;
- Demonstration of the Applicant's legal entitlement to the water or ability to conduct the activity;
- Discussion of whether any governmental approval of the identified activities will be needed, and, if so, whether that additional approval will require compliance with CEQA or NEPA;
- An estimated schedule of completion for each identified activity;

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- Performance measures that would be used to evaluate the amount of water replaced by each identified activity; and
- Monitoring and Reporting Plan outlining the steps necessary and proposed frequency of reporting to show that each identified activity is achieving the intended benefits and replacing Colorado River diversions.

Measures of water conservation specified in the Colorado River Water Supply Plan may include but are not limited to those listed below, and should be considered in the following order of priority:

- Payment for irrigation improvements in Palo Verde Irrigation District (PVID);
- Purchase of water allotments within the Colorado River Basin that will be held in reserve;
- Use of tertiary treated water;
- Implementation of water conservation programs in the floodplain communities of the Chuckwalla, Valley Groundwater Basin, the Palo Verde Mesa Groundwater Basin, and/or Colorado River; and
- Participation in the U.S. Bureau of Land Management's (BLM) Tamarisk Removal Program.

If the Applicant has filed an application to the U.S. Bureau of Reclamation (USBR) to obtain an allocation of water from the Colorado River, this allocation(s) can be used to satisfy some or all of the water conservation offsets on an acre-foot per acre-foot basis. Use of any other options for water offsets will require the Applicant to demonstrate to the satisfaction of the BLM and the Colorado River Basin RWQCB that the appropriate amounts of water will be conserved.

If the project does not result in diversion of Colorado River water (via pumping groundwater from below 234 feet amsl) it will not be necessary to prepare and implement the Colorado River Water Supply Plan; however, the Plan must be approved prior to project-related groundwater pumping ~~is initiated~~below 234 feet amsl to ensure that appropriate conservation measures are implemented in a timely manner, if necessary. The Colorado River Water Supply Plan is separate from the Groundwater Drawdown Monitoring and Reporting Plan (MM WAT-3) and the Drought Water Management and Water Conservation Education Programs (MM WAT-6), and it must be developed, reviewed, approved of, and implemented as a separate plan. Compliance will be verified by the Environmental Monitor.

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Page 4.20-43. The "2013" column of Table 4.20-4 contains a significant error, stating that Combined CVGB water requirements for the year are projected to total 2,948.85 af. This is incorrect, the actual total for the 2013 column is 1,948.85 af. The Water Supply Assessment in Appendix E to the DEIS contains the same error; please correct. enXco requests recalculation and confirmation of all totals contained in Table 4.20-4 and in the WSA.

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Page 4.20-45. Please revise Table 4.20-45 to reflect our comment on page 4.20-3 above by revising the 2013 row to reflect 1,948.85 af of future pumping rather than 2,948.85, and the corresponding result of a balance positive balance of 1,377 acre feet without the proposed project and 877 acre-feet with the proposed project. enXco requests recalculation and confirmation of all totals contained in Table 4.20-5.

In addition, page 4.20-41 of the DEIS states that the estimated CVGB budget of 2,623 afy accounts for construction water demand of the Desert Sunlight project. By enXco's calculation the 2012 and 2013 "Total Outflow and "Balance" figures of Table 4.20-5 do not inadvertently understate "Balance" amounts by accounting for Desert Sunlight project construction water demand in both the "Total Outflow" and the "Balance" column instead of in only one of them. Please confirm.

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Page 4.20-46. Please revise the following clause from the first paragraph of the page to reflect our comment on pages 4.20-20 through 4.20-23, above: "...and groundwater pumping associated with the proposed project or an alternative would be ~~subsequently ceased~~proportionately curtailed until the groundwater resource recovers, which is anticipated to occur in response to participation events, per the nature fractured rock storage and overdraft/drawdown conditions."

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Section 4.23 Short-Term vs. Long-Term Productivity of the Environment

Page 4.23-1. The third sentence of the second paragraph of the page states that a long-term impact of the project is "permanent" damage to desert habitats. enXco is of the opinion that the impact is not "permanent" in the common sense of the word (as opposed to BLM's technical treatment of "temporary" impacts to desert habitat as "permanent" under NEPA terminology). "Long term" is a more appropriate phrase that already appears in the sentence. We therefore request deletion of "permanent" from the sentence.

F001-199

Section 4.24 Summary of Unavoidable Adverse Effects

The following conclusions in Table 4.24-1 are not supported by the analysis in the EIS.

Table 4.24-1, Off-site dust, refers to dust and erosion during construction and operation of the project. The analysis in Section 4.3.7 of the Draft EIS refers to off-site dust during construction and decommissioning.

F001-200

Table 4.24-1, State jurisdictional streambeds, refers to unavoidable adverse offsite impacts to state jurisdictional streambeds. The analysis in Section 4.3.7 states that impacts to state jurisdictional streambeds are only a potential impact. See proposed revision below.

F001-201

Section 4.4.7, Wildlife Habitat [DEIS at 4.4-5] notes that the mitigation measures proposed for the project are expected to effectively mitigate the majority of the project's adverse impacts to

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wildlife habitat, although some residual impacts would remain. Table 4.24-1, On-site habitat loss, should be revised to better reflect this analysis. F001-201 cont.

Section 4.4.7, Wildlife Movement and Habitat Connectivity [DEIS at 4.4-18] notes that mitigation measures for the project would require habitat acquisition in the I-10 corridor and that the habitat at the DHSP project site is modeled as low habitat value, and that much of the local habitat has been disturbed and fragmented and that therefore the DHSP would not substantially alter desert tortoise connectivity. Table 4.24-1, Habitat fragmentation, should be revised to reflect this analysis. F001-202

Page 4.24-4. Please refer to our comment on page 4.4-65, above, regarding the conclusions of the DEIS with regard to cumulative impacts to wildlife movement. F001-203

Table 4.24-1, Potential loss of birds during O&M, and Section 4.4.7, Solar Panel Light, Glare, and Collision Risk, [DEIS at 4.4-21] note that there is a potential risk of collision with the panels. Please revise the discussion on the loss to reflect the potential nature of the impact.

Page 4.24-4. Please conform the description of cultural resources mitigation measures in the "Cultural" row of Table 4.24-2 with the mitigation measures of Section 4.6 of the DEIS, as amended by our comments above. F001-204

Table 4.24-1, Noise and Vibration, notes that the traffic would result in a substantial increase in noise levels north of Lake Tamarisk Road. Section 4.12.6 notes that this level of noise at 50 feet would be within Riverside County's conditionally acceptable range for rural residential land uses and within 180 feet would be back within the normally acceptable range for rural residential land uses. F001-205

Page 4.24-5. The "Special Designations" row of Table 2.24-2 states that there are no significant and unavoidable impacts. Because the Special Designations Section is largely a conglomerate of other environmental disciplines studied in the DEIS, enXco suggests stating that there are no significant and unavoidable impacts separate from those identified among the other environmental disciplines considered in the DEIS. F001-206

Page 4.24-3. The "Inconsistency with public policy" row of the "Visual Resources" category of Table 4.24-1 is incorrect. Please conform the row to the VRM Class IV consistency determination of Section 4.19. F001-207

As such, 4.24-1 must be revised. Suggested revisions are shown below. Only rows that had suggested revisions are shown.

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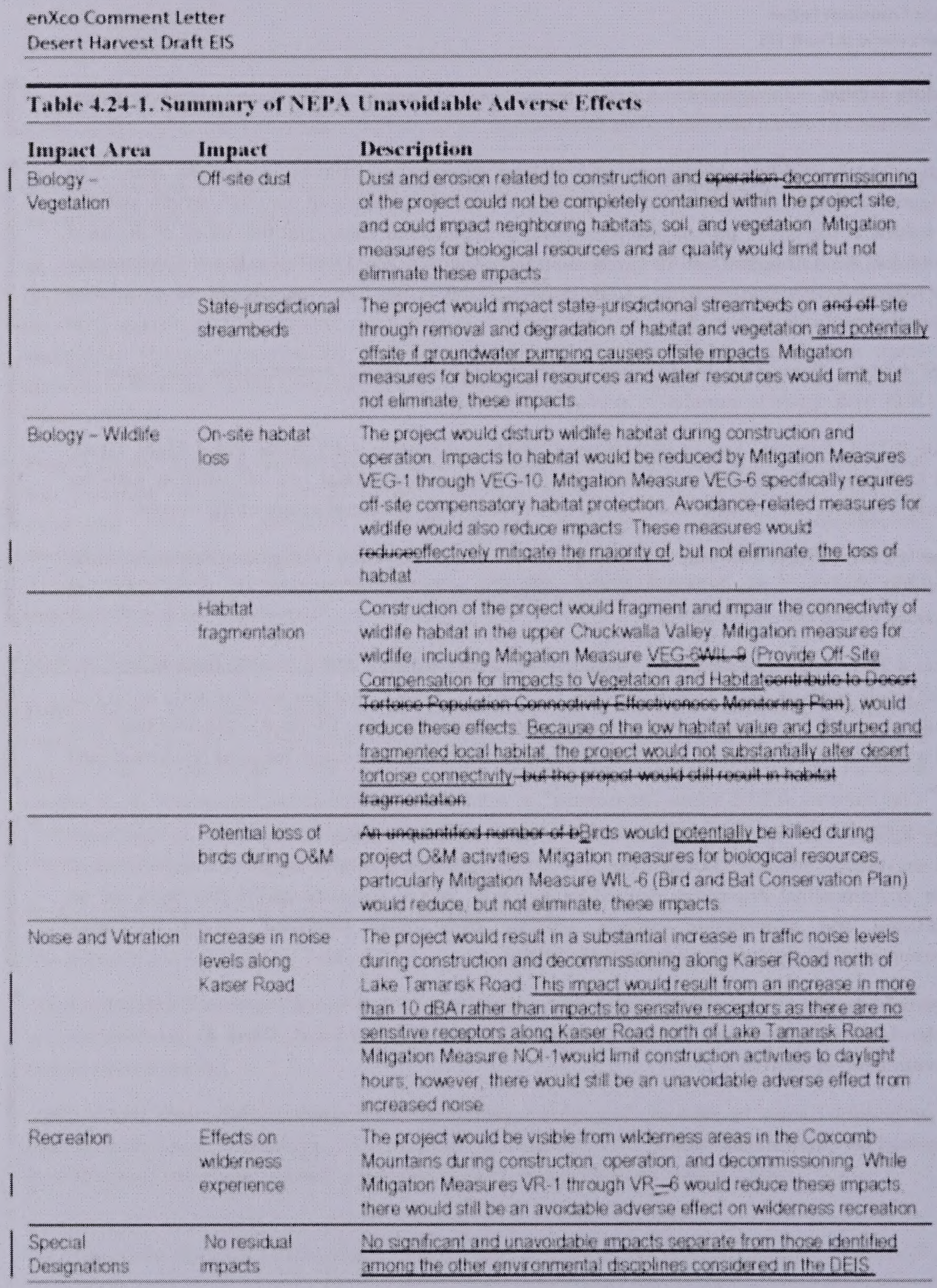
ENXCO



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Desert Harvest Draft EIS

Table 4.24-1. Summary of NEPA Unavoidable Adverse Effects

Impact Area	Impact	Description
Biology – Vegetation	Off-site dust	Dust and erosion related to construction and ~~operation~~ decommissioning of the project could not be completely contained within the project site, and could impact neighboring habitats, soil, and vegetation. Mitigation measures for biological resources and air quality would limit but not eliminate these impacts.
	State-jurisdictional streambeds	The project would impact state-jurisdictional streambeds on ~~and off~~ site through removal and degradation of habitat and vegetation and potentially offsite if groundwater pumping causes offsite impacts. Mitigation measures for biological resources and water resources would limit, but not eliminate, these impacts.
Biology – Wildlife	On-site habitat loss	The project would disturb wildlife habitat during construction and operation. Impacts to habitat would be reduced by Mitigation Measures VEG-1 through VEG-10. Mitigation Measure VEG-6 specifically requires off-site compensatory habitat protection. Avoidance-related measures for wildlife would also reduce impacts. These measures would ~~reduce~~effectively mitigate the majority of, but not eliminate, the loss of habitat.
	Habitat fragmentation	Construction of the project would fragment and impair the connectivity of wildlife habitat in the upper Chuckwalla Valley. Mitigation measures for wildlife, including Mitigation Measure VEG-6~~WIL-9~~ (Provide Off-Site Compensation for Impacts to Vegetation and Habitat~~contribute to Desert Tortoise Population Connectivity Effectiveness Monitoring Plan~~), would reduce these effects. Because of the low habitat value and disturbed and fragmented local habitat, the project would not substantially alter desert tortoise connectivity~~, but the project would still result in habitat fragmentation~~.
	Potential loss of birds during O&M	~~An unquantified number of b~~Birds would potentially be killed during project O&M activities. Mitigation measures for biological resources, particularly Mitigation Measure WIL-6 (Bird and Bat Conservation Plan) would reduce, but not eliminate, these impacts.
Noise and Vibration	Increase in noise levels along Kaiser Road	The project would result in a substantial increase in traffic noise levels during construction and decommissioning along Kaiser Road north of Lake Tamarisk Road. This impact would result from an increase in more than 10 dBA rather than impacts to sensitive receptors as there are no sensitive receptors along Kaiser Road north of Lake Tamarisk Road. Mitigation Measure NOI-1would limit construction activities to daylight hours; however, there would still be an unavoidable adverse effect from increased noise.
Recreation	Effects on wilderness experience	The project would be visible from wilderness areas in the Coxcomb Mountains during construction, operation, and decommissioning. While Mitigation Measures VR-1 through VR--6 would reduce these impacts, there would still be an avoidable adverse effect on wilderness recreation.
Special Designations	No residual impacts	No significant and unavoidable impacts separate from those identified among the other environmental disciplines considered in the DEIS.

F001-207

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Desert Harvest Draft EIS

F001-207 cont.

Table 4.24-1. Summary of NEPA Unavoidable Adverse Effects

Impact Area	Impact	Description
Visual Resources	Land scarring and vegetation clearance	Construction of the project would require extensive land scarring and vegetation clearance. Mitigation Measures VR-1 and VR-2 would reduce the visual impacts of these activities, but would not eliminate impacts, which would be long-term and unavoidable.
	~~Inconsistency with public policy~~	~~The project would not meet applicable Interim VRM Class III management objectives, even with the implementation of mitigation measures for visual resources. The project would also conflict with numerous Riverside County General Plan policies.~~

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Appendix O

Accounting Surface Technical Memorandum

F001-208

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F001-208 cont.

AECOM

AECOM
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Memorandum

To	Bureau of Land Management, Palm Springs – South Coast Field Office
Subject	Desert Sunlight Solar Farm Project: Response to Public Comments Regarding Potential Relationship Between Groundwater Pumping Levels and Impacts to the Colorado River
From	Amanda Beck, First Solar
Date	January 5, 2011

Introduction

This technical memorandum provides an analysis of available groundwater level data in connectio with comments on the Desert Sunlight Solar Farm Project (Project) Draft Environmental Impact Statement (DEIS) regarding the potential relationship between proposed groundwater pumping by the Project and the proposed Accounting Surface as has been defined by the United States Geological Survey (USGS) and United States Bureau of Reclamation (USBR). AECOM prepared this technical memorandum at the request of First Solar, Inc. in order to assist the Bureau of Land Management (BLM) in its further analysis of this issue and its response to comments on the DEIS.

While general concerns regarding a potential relationship between groundwater pumping and surface water levels are noted in several comments on the DEIS, including comments submitted b the U.S. Environmental Protection Agency and Metropolitan Water District of Southern California, the issue addressed in this technical memorandum is most clearly set out in the comments submitted by the Colorado River Board of California (Board), dated December 6, 2010. In those comments, the Board states that the area of the Project site, the upper Chuckwalla Valley Groundwater Basin (Basin), is within the area defined as within the "Accounting Surface" and that the Basin aquifer is hydraulically connected to the Colorado River through the Palo Verde Mesa Groundwater Basin. The Board further states that any amount of water withdrawn from the Basin aquifer is water that would be replaced by Colorado River, in total or in part, and should be considered a use of Colorado River water for which a valid contract for water use must be obtaine

This technical memorandum addresses the issue raised by the Board's comments by explaining th background and framework of the proposed Accounting Surface Rule and then analyzing the groundwater pumping and water elevation data for the Project relative to application of the Accounting Surface Rule. This technical memorandum does not take any position regarding whether the Accounting Surface Rule, as currently proposed or as may be adopted, is an appropriate methodology for analyzing a potential hydraulic connection between groundwater pumping and the Colorado River but, instead, solely responds to the methodology as noted in the Board's comments.

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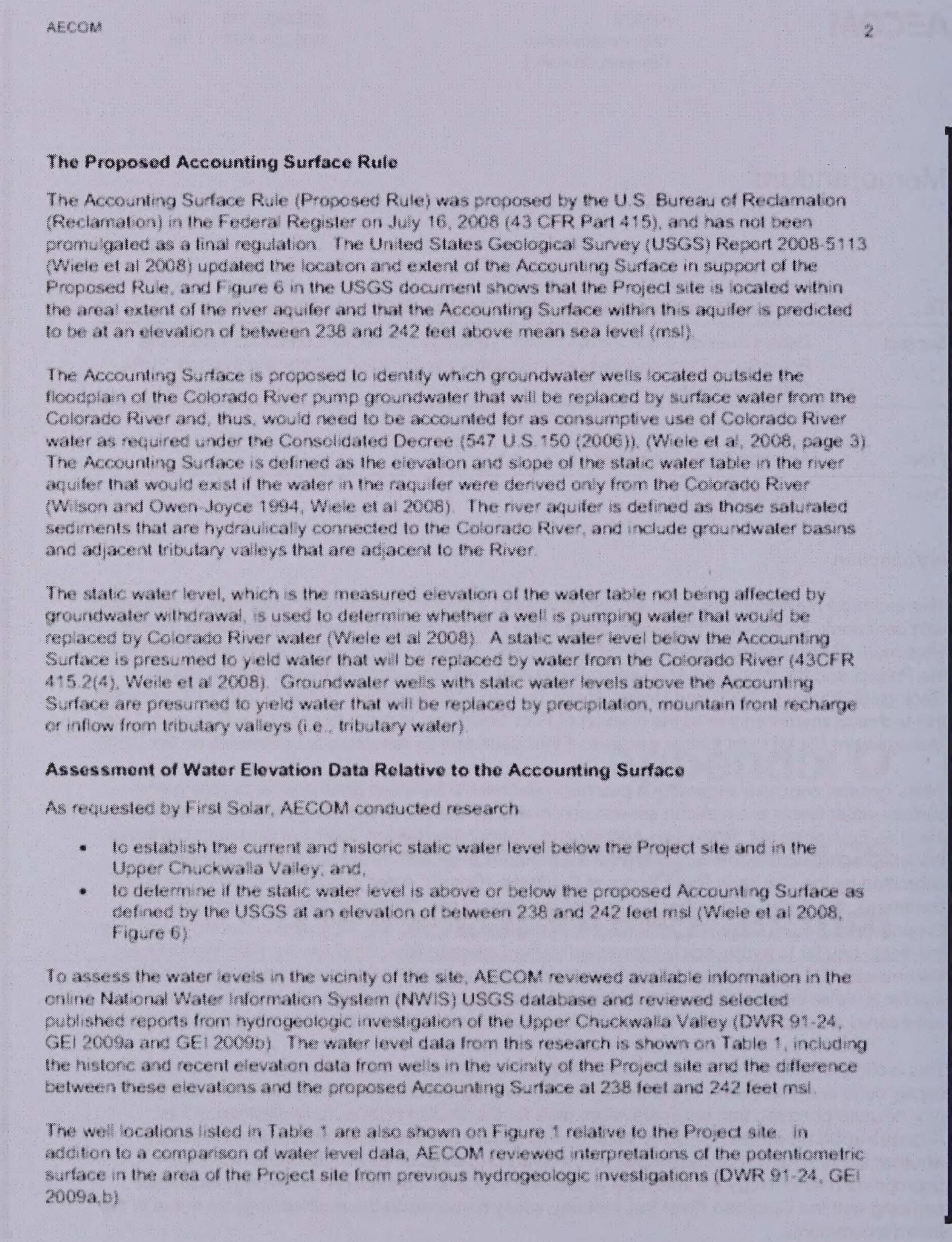

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The Proposed Accounting Surface Rule

The Accounting Surface Rule (Proposed Rule) was proposed by the U.S. Bureau of Reclamation (Reclamation) in the Federal Register on July 16, 2008 (43 CFR Part 415), and has not been promulgated as a final regulation. The United States Geological Survey (USGS) Report 2008-5113 (Wiele et al 2008) updated the location and extent of the Accounting Surface in support of the Proposed Rule, and Figure 6 in the USGS document shows that the Project site is located within the areal extent of the river aquifer and that the Accounting Surface within this aquifer is predicted to be at an elevation of between 238 and 242 feet above mean sea level (msl).

The Accounting Surface is proposed to identify which groundwater wells located outside the floodplain of the Colorado River pump groundwater that will be replaced by surface water from the Colorado River and, thus, would need to be accounted for as consumptive use of Colorado River water as required under the Consolidated Decree (547 U.S. 150 (2006)). (Wiele et al, 2008, page 3). The Accounting Surface is defined as the elevation and slope of the static water table in the river aquifer that would exist if the water in the raquifer were derived only from the Colorado River (Wilson and Owen-Joyce 1994, Wiele et al 2008). The river aquifer is defined as those saturated sediments that are hydraulically connected to the Colorado River, and include groundwater basins and adjacent tributary valleys that are adjacent to the River.

The static water level, which is the measured elevation of the water table not being affected by groundwater withdrawal, is used to determine whether a well is pumping water that would be replaced by Colorado River water (Wiele et al 2008). A static water level below the Accounting Surface is presumed to yield water that will be replaced by water from the Colorado River (43CFR 415.2(4), Weile et al 2008). Groundwater wells with static water levels above the Accounting Surface are presumed to yield water that will be replaced by precipitation, mountain front recharge or inflow from tributary valleys (i.e., tributary water).

Assessment of Water Elevation Data Relative to the Accounting Surface

As requested by First Solar, AECOM conducted research

- to establish the current and historic static water level below the Project site and in the Upper Chuckwalla Valley; and,
- to determine if the static water level is above or below the proposed Accounting Surface as defined by the USGS at an elevation of between 238 and 242 feet msl (Wiele et al 2008, Figure 6).

To assess the water levels in the vicinity of the site, AECOM reviewed available information in the online National Water Information System (NWIS) USGS database and reviewed selected published reports from hydrogeologic investigation of the Upper Chuckwalla Valley (DWR 91-24, GEI 2009a and GEI 2009b). The water level data from this research is shown on Table 1, including the historic and recent elevation data from wells in the vicinity of the Project site and the difference between these elevations and the proposed Accounting Surface at 238 feet and 242 feet msl.

The well locations listed in Table 1 are also shown on Figure 1 relative to the Project site. In addition to a comparison of water level data, AECOM reviewed interpretations of the potentiometric surface in the area of the Project site from previous hydrogeologic investigations (DWR 91-24, GEI 2009a,b).

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F001-208 cont.

The available well data shows that the static water level elevation in the vicinity of the Project site have been measured between 469 feet and 504 feet msl (see Table1, 5S/15E-13C01, 4S/16E-19M01, 19N01, 30D01 and CW#2 and P-12). A review of cross sections and potentiometric maps from prior investigations of the Upper Chuckwalla Valley show that the water level elevation has been interpreted to be between about 500 to 540 feet msl in the area of the Project site. The difference between the static water level measurements for the wells in the vicinity of the Project site and interpreted potentiometric surface from prior investigations and the proposed Accounting Surface is between 241 and 266 feet. The range in the difference reflects the variability in the water level measurements from the wells surrounding the Project site and the lower (238 feet) and higher (242 feet) proposed accounting surface for the Basin. Most significantly, the data show that static water level is well above the proposed Accounting Surface. These water level data, either from the wells or used in the interpretation of the potentiometric surface, were collected from 1961 and 1992 (Table 1).

More recent data from a well close to the community of Desert Center (5S/16E-7P01, 7P02) and several miles south-southeast of the Desert Sunlight site show similar water level elevations to those measured in the early 1960s then show a period of water level decline in the mid-1980s due to expanded agricultural operations, where combined pumping exceeded 20,000 acre-feet per year (afy)(GEI 2009b) which is well above historic water usage for the western part of the Basin. These agricultural operations began to be curtailed in the late 1980s and water levels in the Desert Center area have recovered to levels similar to the early 1960s. The most recent water level elevation measured in Well 5S/16E-17P02 was 462 feet msl or about 220 feet above the proposed Accounting Surface (Table 1).

Another important element in the potential implications of the Accounting Surface for the Project is the proposed groundwater pumping and the predicted level of drawdown in the water supply wells from which Project water supplies are obtained. A numerical groundwater model was developed for the DEIS (Appendix G) to evaluate potential affects from Project pumping on adjacent water supply wells and on the Basin storage. Project water use during operation will be minimal (0.2 afy over a 30-year Project life for a total of only 60 acre-feet (af)). Project water use that was modeled during construction was between 1,300 and 1,400 af over a 26-month construction period. The model predicted drawdown in either a single well or two water supply wells of between about 10 and 20 feet over the construction period. Given the above water elevation data, the drawdown will be well above the proposed Accounting Surface. In addition, groundwater modeling of the cumulative impacts from the combined pumping of all proposed solar power projects within the Basin show that after 30 years the water table would drop between 20 and 50 feet (AECOM 2010, GEI 2009a). Even with this predicted decline in the water table, caused largely by other projects' water use, the static water table in the vicinity of the Desert Sunlight Project would be well above the Accounting Surface.

Conclusions

A comparison of available historic and recent groundwater level data from wells in the vicinity of the Desert Sunlight Solar Farm Project site and prior interpretations of the water level elevation below the Project site reveal that the static water level elevation is well above the proposed Accounting Surface. A buffer of more than 200 feet is indicated in the groundwater level data. The data indicate that the Project would therefore not impact the Accounting Surface as it would draw groundwater from well above the surface of what is termed "tributary" water (i.e., other than a Colorado River source, Wiele et al 2008). The "tributary" water replenishing groundwater withdrawals by the Project is therefore attributable to inflow from precipitation, mountain front recharge, Pinto Basin underflow and Hayfield Basin underflow (GEI 2009a).

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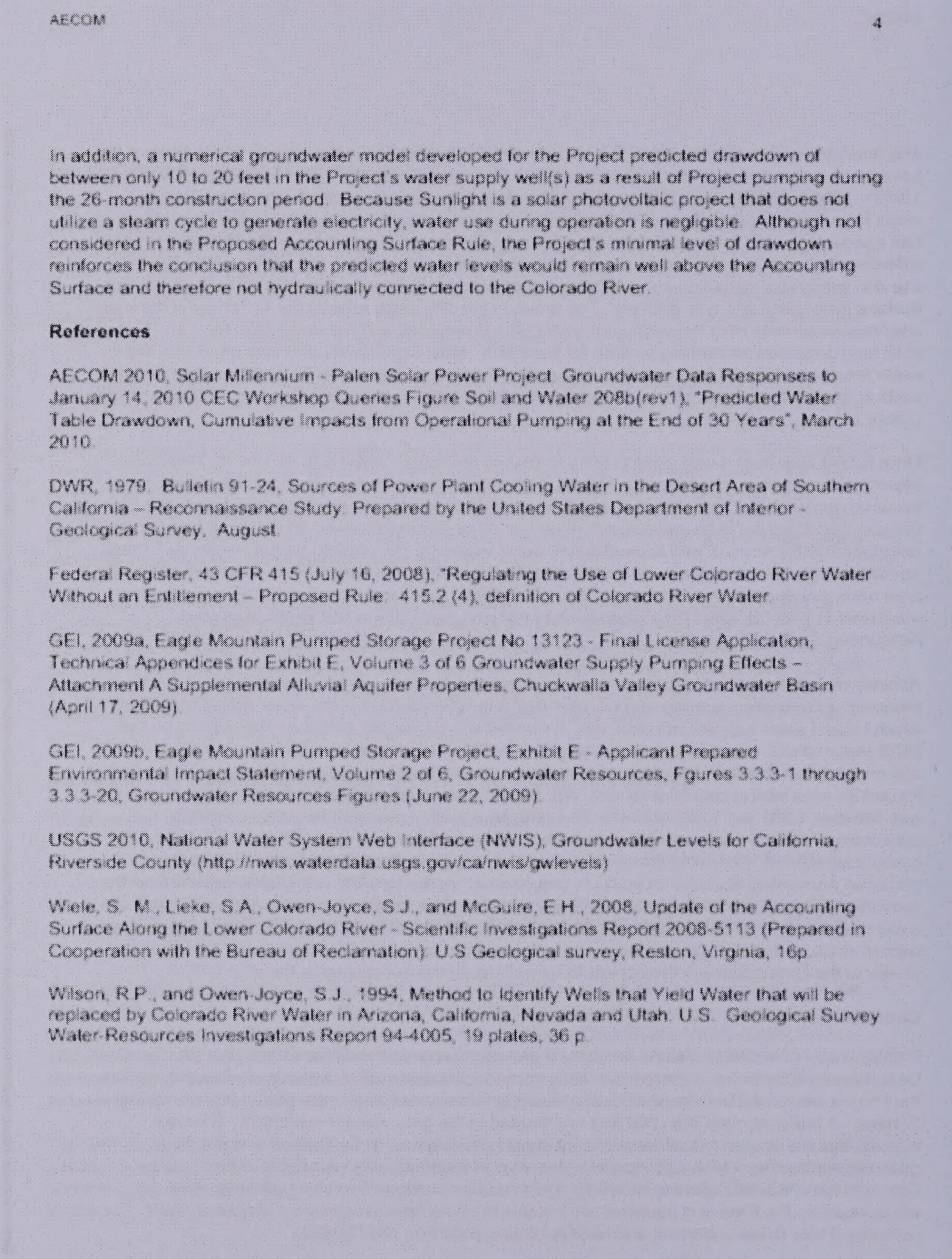

AECOM 4

In addition, a numerical groundwater model developed for the Project predicted drawdown of between only 10 to 20 feet in the Project's water supply well(s) as a result of Project pumping during the 26-month construction period. Because Sunlight is a solar photovoltaic project that does not utilize a steam cycle to generate electricity, water use during operation is negligible. Although not considered in the Proposed Accounting Surface Rule, the Project's minimal level of drawdown reinforces the conclusion that the predicted water levels would remain well above the Accounting Surface and therefore not hydraulically connected to the Colorado River.

F001-208

References

AECOM 2010, Solar Millennium - Palen Solar Power Project. Groundwater Data Responses to January 14, 2010 CEC Workshop Queries Figure Soil and Water 208b(rev1), "Predicted Water Table Drawdown, Cumulative Impacts from Operational Pumping at the End of 30 Years", March 2010.

DWR, 1979. Bulletin 91-24, Sources of Power Plant Cooling Water in the Desert Area of Southern California – Reconnaissance Study. Prepared by the United States Department of Interior - Geological Survey. August.

Federal Register, 43 CFR 415 (July 16, 2008), "Regulating the Use of Lower Colorado River Water Without an Entitlement – Proposed Rule. 415.2 (4), definition of Colorado River Water.

GEI, 2009a, Eagle Mountain Pumped Storage Project No 13123 - Final License Application, Technical Appendices for Exhibit E, Volume 3 of 6 Groundwater Supply Pumping Effects – Attachment A Supplemental Alluvial Aquifer Properties, Chuckwalla Valley Groundwater Basin (April 17, 2009).

GEI, 2009b, Eagle Mountain Pumped Storage Project, Exhibit E - Applicant Prepared Environmental Impact Statement, Volume 2 of 6, Groundwater Resources, Fgures 3.3.3-1 through 3.3.3-20, Groundwater Resources Figures (June 22, 2009).

USGS 2010, National Water System Web Interface (NWIS), Groundwater Levels for California, Riverside County (http://nwis.waterdata.usgs.gov/ca/nwis/gwlevels)

Wiele, S. M., Lieke, S.A., Owen-Joyce, S.J., and McGuire, E.H., 2008, Update of the Accounting Surface Along the Lower Colorado River - Scientific Investigations Report 2008-5113 (Prepared in Cooperation with the Bureau of Reclamation). U.S Geological survey, Reston, Virginia, 16p.

Wilson, R.P., and Owen-Joyce, S.J., 1994, Method to Identify Wells that Yield Water that will be replaced by Colorado River Water in Arizona, California, Nevada and Utah. U.S. Geological Survey Water-Resources Investigations Report 94-4005, 19 plates, 36 p.

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WELLS DATABASE
PROJECT BEACON

WELL DATA[1]									WELL COMPLETION DATA				GROUNDWATER LEVELS			WELL PERFORMANCE DATA[2]				COMMENTS
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Well Owner	Published Use	Year	Status (a/i)	Lithologic Log (Y/N)	Ground Surface Elevation	Total Depth	Well Diameter	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Pump Model	Pumping Test Date	Pumping Rate	Specific Capacity	
		NAD 83	NAD 83						feet-msl	feet-bgs	inches		Date	feet-bgs	feet-msl	(hp)	Mo/Yr	gpm	gpm/ft	
02S/17E-30E01								Yes	856	621		uncased	Jan-33	325	525					
02S/17E-30E01S	002S017E30E001S																12/31/1923	7		
03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			Sep-54	150	931					
03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			Jun-55	154.84	926					
03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			Sep-55	156.2	925					
03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			Dec-55	155.8	925					
03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			Feb-56	155.2	925					
03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			Feb-56	155.1	926					
03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			Feb-56	155	926					
03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			Mar-56	155	926					
03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			May-56	154.88	926					
03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			Jul-56	155.3	925					
03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			Aug-56	155.3	925					
03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			Sep-56	155.7	925					
03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			May-57	155.21	925					
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03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			Jun-57	155.45	925					
03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			Aug-57	155.49	925					
03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			Sep-57	155.37	925					
03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			Nov-57	155	926					
03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			Mar-58	155.1	926					
03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			May-58	155.4	925					
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03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			Jun-60	155.8	925					
03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			Oct-60	155.93	925					
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03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			Mar-65	159.81	921					
03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			Nov-65	160.21	920					
03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			Mar-66	161.95	919					
03S/15E-04J01S	003S015E04J001S	33.93567885	-115.4099836						1,081	575			Oct-66	162.94	918					

Table -1 Groundwater Elevation from Selected Wells in the Project Vicinity (12-22).xlsx 1/5/2011

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WELLS DATABASE
PROJECT BEACON

WELL DATA									WELL COMPLETION DATA				GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Well Owner	Published Use	Year	Status (on)	Lithologic Log (Y/N)	Ground Surface Elevation	Total Depth	Well Diameter	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Pump Model	Pumping Test Date	Pumping Rate	Specific Capacity	COMMENTS
		NAD 83	NAD 83						feet-msl	feet-bgs	inches		Date	feet-bgs	feet-msl	(Hp)	Mo/Yr	gpm	gpm/ft	
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Mar-67	163.35	917					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Oct-67	163.78	917					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Oct-69	165.96	916					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			May-70	164.98	916					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Oct-70	166.17	914					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Mar-71	166.54	914					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Jan-72	165.64	916					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Jun-72	166.97	914					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Mar-73	166.31	914					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Sep-73	167.72	913					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Feb-74	167.72	913					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Oct-74	167.46	913					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Apr-75	167.55	913					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Nov-75	168	913					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Mar-76	168.25	912					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Nov-76	168.81	912					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Apr-77	169	912					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Oct-77	169.43	911					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			May-78	169.06	912					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Oct-78	169.75	911					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Apr-79	168.86	912					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Oct-79	170.49	910					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Apr-80	170.55	910					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Oct-80	170.2	910					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Apr-81	170.03	911					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Oct-81	171.49	909					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Apr-82	170.89	910					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Jan-83	169.73	911					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Aug-84	167.24	913					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Feb-85	166.44	914					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Jun-85	166.27	914					
03S/18E-03Q01								No	1,875	17			Jun-61	13	1862					
03S/19E-11A01								No	1,580	40			Jun-61	37	1543					
04S/15E-13C01S	004S015E13C001S							Yes	683	452		220-246, 317-328	Feb-81	188	495		Feb-82	450		
04S/16E-19M01								No	610	565			Oct-61	127	483					
04S/16E-19N01								No	600	151			Apr-61	112	488					
04S/16E-21N01								No	565	38			Apr-61	-	-					
04S/16E-29R01								No	545	116			Jun-61	60	485					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	119			Apr-61	79.65	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	119			Sep-61	80	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	119			Oct-61	79.93	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	119			Nov-61	79.92	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	119			Dec-61	79.94	460					

Table -1 Groundwater Elevation from Selected Wells in the Project Vicinity (12-23).xlsx1/5/2011

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COMMENT SET F001, CONT.
ENXCO

F001-208 cont.

WELLS DATABASE
PROJECT BEACON

WELL DATA¹									WELL COMPLETION DATA				GROUNDWATER LEVELS			WELL PERFORMANCE DATA²				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Well Owner	Published Use	Year	Status (on)	Lithologic Log (YES)	Ground Surface Elevation	Total Depth	Well Diameter	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Pump Model	Pumping Test Date	Pumping Rate	Specific Capacity	COMMENTS
		NAD 83	NAD 83						feet-msl	feet-bgs	inches		Date	feet-bgs	feet-msl	(Hz)	Mo/Yr	gpm	gpm/ft	
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Jan-62	79.92	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Feb-62	79.94	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Mar-62	79.52	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Apr-62	79.88	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			May-62	79.95	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Jun-62	79.97	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Nov-62	79.96	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Mar-63	79.99	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Oct-63	80	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Mar-64	80.04	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Mar-65	80.11	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Nov-65	80.27	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Oct-66	75.1	465					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Mar-67	78.80	461					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Oct-67	78.78	461					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			May-70	78.35	462					
04S/16E-30D01S	004S016E30D001S							No	543	619			Oct-61	114	429		Oct-60	5075	110	
04S/16E-30D01S	004S016E30D001S	33.8008503	-115.3347034						543	619			May-61	113.81	429		Oct-60	5075	110	
04S/16E-30D01S	004S016E30D001S	33.8008503	-115.3347034						543	619			Jun-61	114.3	429					
04S/16E-30D01S	004S016E30D001S	33.8008503	-115.3347034						543	619			May-76	118.53	424					
04S/16E-31D01S	004S016E31D001S							Yes	595	600		135-597	Jun-61	95	500		Jun-61	2328	44	
04S/16E-31R01								Yes	555	34			Apr-61	–	–					
04S/16E-32D01								Yes	555	619		265-555	Jun-61	79	476					
04S/16E-32D01S	004S016E32D001S																Oct-61	2750	80	
04S/16E-32E01								No	555	77		63-66, 245-252	Apr-61	–	–					
04S/16E-32M01								Yes	555	555			Jun-61	74	481					
04S/16E-32M01S	004S016E32M001S																Jun-61	2000		
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Apr-61	71.41	477		Jun-61	2000		
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Apr-61	71.61	476					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Jun-61	71.42	477					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Jun-61	73.48	475					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Feb-62	69.33	479					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Mar-62	70.79	477					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Apr-62	72.42	476					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			May-62	73.82	474					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Aug-62	79.85	468					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Sep-62	79.57	468					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Nov-62	77.17	471					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			May-70	77.35	471					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Apr-78	66.85	481					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Jul-80	72.87	475					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Jan-81	74.16	474					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Oct-81	66.9	481					

Table -1 Groundwater Elevation from Selected Wells in the Project Vicinity (12-23).xlsx1/5/2011

O-7

COMMENT SET F001, CONT.
ENXCO

F001-208 c

WELLS DATABASE
PROJECT BEACON

WELL DATA									WELL COMPLETION DATA				GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Well Owner	Published Use	Year	Status (a/i)	Lithologic Log (SEAJ)	Ground Surface Elevation	Total Depth	Well Diameter	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Pump Model	Pumping Test Date	Pumping Rate	Specific Capacity	COMMENTS
		NAD 83	NAD 83						feet-msl	feet-bgs	inches		Date	feet-bgs	feet-msl	(Hp)	Mo/Yr	gpm	gpm/ft	
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Apr-82	82.01	466					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Jan-83	90.29	458					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Jul-84	121.88	426					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Feb-85	120.8	427					
04S/16E-35Z01								No	470	-			Jan-17	13	457					
04S/17E-06C01								Yes	500	561			Oct-61	22	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Jan-52	22.5	478		Apr-61	106		
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				May-52	21	479					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Sep-54	21.2	479					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Oct-56	21.4	479					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				May-57	21.6	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Sep-59	21.8	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Apr-61	21.82	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Nov-61	22.4	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Jan-62	22.2	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Mar-62	22.14	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Nov-62	22.41	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Mar-63	22.22	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Oct-63	22.31	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Mar-64	22.31	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Nov-64	22.4	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Mar-65	22.51	477					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Nov-65	22.3	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Mar-66	22.5	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Oct-66	22.74	477					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Mar-67	22.55	477					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Oct-67	22.85	477					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Apr-68	22.8	477					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Nov-68	22.71	477					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Apr-69	24.82	475					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Oct-69	24.72	475					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Apr-70	23.16	477					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Oct-70	23.55	476					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Mar-71	23.57	476					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Apr-78	22.88	478.12					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Jan-80	24.4	476					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Jan-81	24.52	475					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Oct-81	25.28	475					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Apr-82	26.09	473					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Jan-83	25.61	475					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Jul-84	25.31	475					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Feb-85	25.42	475					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Jun-86	25.95	474					

Table -1 Groundwater Elevation from Selected Wells in the Project Vicinity (12-23).xlsx1/6/2011

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COMMENT SET F001, CONT.
ENXCO

F001-208 cont.

WELLS DATABASE
PROJECT BEACON

WELL DATA									WELL COMPLETION DATA				GROUNDWATER LEVELS			WELL PERFORMANCE DATA				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Well Owner	Published Use	Year	Status (op)	Lithologic Log (Y/N)	Ground Surface Elevation	Total Depth	Well Diameter	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Piezo Model	Pumping Test Date	Pumping Rate	Specific Capacity	COMMENTS
		NAD 83	NAD 83						feet-msl	feet-bgs	inches		Date	feet-bgs	feet-msl	(Hz)	Mo/Yr	gpm	gpm/ft	
05S/14E-24R01								Yes	1,072	732			Jan-55	570	502					
05S/14E-35L01								No	1,270	800		349-784	Sep-61	570	700					
05S/14E-35L01								No	1,270	641			Sep-61	571	699					
05S/14E-35L01								No	1,190	877		526-748	Sep-61	485	705					
05S/14E-35L01								Yes	1,389	501		400-501	Nov-88	Dry	-					
05S/14E-35L01								Yes	1,342	835		589-795	Nov-89	635	707					
05S/14E-35L01S	005S014E35L001S																Nov-61	2		
05S/14E-35L02S	005S014E35L002S																Nov-61	6		
05S/15E-01E01								No	645	755		715-752	Oct-61	148	497					
05S/15E-01L01								Yes	646	780			Oct-61	139	507					
05S/15E-01L01S	005S015E01L001S																Mar-61	1674	42	
05S/15E-01L01S	005S015E01L001S																Mar-60	3150		
05S/15E-02E01S	005S015E02E001S																Nov-60	3330	56	
05S/15E-12N01								Yes	688	746		-	May-61	173	515					
05S/15E-12N01S	005S015E12N001S	33.7440238	-115.3781377						671	748			Apr-67	175	496		May-61	3590		
05S/15E-12N01S	005S015E12N001S	33.7440238	-115.3781377						671	748			Jun-67	172	499					
05S/15E-12N01S	005S015E12N001S	33.7440238	-115.3781377						671	748			May-70	172	499					
05S/15E-12N01S	005S015E12N001S	33.7440238	-115.3781377						671	748			Mar-92	190	481					
05S/15E-12N01S	005S015E12N001S	33.7440238	-115.3781377						671	749			Mar-00	183	488					
05S/15E-13B01								Yes	656	788		-	Sep-61	160	496					
05S/15E-14E01								No	726	799		-	Nov-61	218	508					
05S/15E-14J01								No	716	63		-	-	-	-					
05S/15E-15E01								No	805	868		-	Nov-61	313	492					
05S/15E-23N01								No	836	465		-	Mar-61	324	512					
05S/15E-27B01								Yes	900	664		563-625	Oct-61	395	505					
05S/15E-27B01S	005S015E27B001S	33.7139794	-115.4038719						900	644			May-58	395	505					
05S/15E-27B01S	005S015E27B001S	33.7139794	-115.4038719						900	644			Mar-61	395	505					
05S/15E-27B01S	005S015E27B001S	33.7139794	-115.4038719						900	644			Jun-61	395	505					
05S/15E-27B02								No	900	--		224-506	-	-	-					
05S/15E-27H01								No	904	558		--	Mar-61	429	475					
05S/15E-29F01								No	1,046	650		--	Sep-61	386	660					
05S/15E-2E01								No	706	120		--	Oct-61	216	490					
05S/16E-05B01								No	556	114		--	Jun-61	71	485					
05S/16E-05B02								Yes	548	716		-	Oct-61	69	479					
05S/16E-05E01								No	570	124		--	-	-	-					
05S/16E-05F01S	005S016E05F001S	33.7879375	-115.3378755						544				Oct-00	80	464					
05S/16E-05F02S	005S016E05F002S	33.7878744	-115.3380088						545	259			Jun-99	81	464					
05S/16E-05F02S	005S016E05F002S	33.7878744	-115.3380088						545	259			Oct-00	80	465					
05S/16E-05F02S	005S016E05F002S	33.7878744	-115.3380088						545	259			Oct-08	80	465					
05S/16E-05M01S	005S016E05M001S	33.785728	-115.3441312						557				Oct-00	90	467					
05S/16E-06N01								Yes	604	723		226-331, 334-722	Jun-61	126	478					
05S/16E-07A01								No	614	648			Jun-61	61	553					
05S/16E-07B01								Yes	611	765		350-765	Jun-61	126	485					

Table -1 Groundwater Elevation from Selected Wells in the Project Vicinity (12-23).xlsx 1/5/2011

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COMMENT SET F001, CONT.
ENXCO

F001-208

WELLS DATABASE
PROJECT BEACON

WELL DATA									WELL COMPLETION DATA				GROUNDWATER LEVELS			WELL PERFORMANCE DATA				COMMENTS
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Well Owner	Published Use	Year	Status (op)	Lithologic Log (Y/N)	Ground Surface Elevation	Total Depth	Well Diameter	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Pump Model	Pumping Test Data	Pumping Rate	Specific Capacity	
		NAD 83	NAD 83						feet-msl	feet-bgs	inches		Date	feet-bgs	feet-msl	(Hp)	Mo/Yr	gpm	gpm/ft	
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Apr-61	121	483		Feb-59	1324	54	
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Apr-61	128	476		Feb-56	3034	110	
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Jun-61	125	479		Jun-61	1318	124	
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Jun-61	127	477		Apr-55	707		
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Jun-61	127	477		Apr-61	1118		
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Jun-61	126	478					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Jun-61	128	476					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Jun-61	129	475					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Aug-61	127	477					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Oct-61	124	480					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Oct-61	124	480					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Oct-61	125	479					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Oct-61	125	479					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Nov-61	127	477					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Nov-62	166	438					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Apr-70	128	476					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Oct-81	194	410					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Feb-82	189	415					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Mar-82	190	414					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Sep-92	188	416					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Apr-93	183	421					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Sep-93	182	422					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Apr-94	179	425					
05S/16E-07P01								Yes	598	347		248-293, 299-347	Apr-61	121	477					
05S/16E-07P01S	005S016E07P001S	33.74557395	-115.3533147						598	347			Sep-52	108	490					
05S/16E-07P01S	005S016E07P001S	33.74557395	-115.3533147						598	347			Jun-90	213	385					
05S/16E-07P01S	005S016E07P001S	33.74557395	-115.3533147						598	347			Oct-95	208	390					
05S/16E-07P01S	005S016E07P001S	33.74557395	-115.3533147						598	347			Mar-81	199	399					
05S/16E-07P01S	005S016E07P001S	33.74557395	-115.3533147						598	347			Feb-82	188	410					
05S/16E-07P02S	005S016E07P002S	33.7453658	-115.3555793						598	787			Oct-00	137	462					
05S/16E-08A01								Yes	560	200		163-168, 172-180	Sep-61	83	477					
05S/16E-08K01								Yes	555	212		154-162, 170-180	Jun-61	83	472					
05S/16E-09E01								No	545	--			Jun-61	--	--					
05S/16E-16Z01								No	--	73			Jun-61	14	--					
05S/16E-16M01								No	646	780			Apr-61	161	485					
05S/16E-18Q01								No	460	37			Jun-61	--	--					
05S/16E-22N01								No	653	314			Dec-61	168	485					
05S/16E-25P01								No	596	660			May-61	113	483					
05S/16E-36M01								Yes	730	357		291-357	Sep-61	274	456					
05S/17E-17F01S	005S017E17F001S	33.79807585	-115.2488671						574	998			Apr-61	108	466					
05S/17E-17F01S	005S017E17F001S	33.79807585	-115.2488671						574	998			May-70	111	463					
05S/17E-17F01S	005S017E17F001S	33.79807585	-115.2488671						574	998			Mar-92	113	461					
05S/17E-19Q01								Yes	535	780		314-758	Apr-61	78	457					

Table 4-1 Groundwater Elevation from Selected Wells in the Project Vicinity (12-23).xlsx 1/6/2011

O-10

COMMENT SET F001, CONT.
ENXCO

F001-208 cont.

WELLS DATABASE
PROJECT BEACON

WELL DATA[1]									WELL COMPLETION DATA				GROUNDWATER LEVELS			WELL PERFORMANCE DATA[2]				COMMENTS
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Well Owner	Published Use	Year	Status (op)	Lithologic Log (YES)	Ground Surface Elevation	Total Depth	Well Diameter	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Pump Model	Pumping Test Date	Pumping Rate	Specific Capacity	
		NAD 83	NAD 83						feet-msl	feet-bgs	inches		Date	feet-bgs	feet-msl	(Hp)	Mo/Yr	gpm	gpm/ft	
05S/17E-19Q01S	005S017E19Q001S	33.71448456	-115.2472004						538	780			Apr-61	76	462					
05S/17E-19Q01S	005S017E19Q001S	33.71448456	-115.2472004						538	780			Apr-61	76	462					
05S/17E-19Q01S	005S017E19Q001S	33.71448456	-115.2472004						538	780			May-70	75	463					
05S/17E-19Q01S	005S017E19Q001S	33.71448456	-115.2472004						538	780			Feb-82	82	456					
05S/17E-20P01								No	495	10										
05S/17E-21Z01								No					Jan-17	58						
05S/17E-29E01								Yes	533	983			Apr-61	84	449					
05S/17E-29H01								Yes	495	1,025		uncased	Aug-61							
05S/17E-30F01								Yes	570	720		120-288, 314-698	Apr-61	108	462					
05S/17E-30G01S	005S017E30G001S	33.7079481	-115.2388134						543				Mar-00	116	428					
05S/17E-30P01								No	620	187			Jun-61							
05S/17E-30P01S	005S017E30P001S	33.70657607	-115.2404227						607	152			May-57	150	457					
05S/17E-33N01								Yes	597	758		296-758	Apr-61	173	424					
05S/17E-33N01S	005S017E33N001S	33.6661321	-115.2210885						592	752			Apr-61	173	419					
05S/17E-33N01S	005S017E33N001S	33.6661321	-115.2210885						592	758			Apr-61	173	419					
05S/17E-33N01S	005S017E33N001S	33.6661321	-115.2210885						592	758			Oct-61	173	418					
05S/17E-33N01S	005S017E33N001S	33.6661321	-115.2210885						592	758			Apr-78	175	417					
06S/15E-24E01S	006S015E24E001S	33.63351075	-115.3774833						1,995	22			Aug-61	17	1978					
06S/15E-24E02S	006S015E24E002S	33.63520153	-115.3794268						2,000	22			Aug-61	19	1981					
06S/15E-24E03S	006S015E24E003S	33.63279168	-115.3758156						1,995	14			May-52	10	1985					
06S/15E-30Q01S	006S015E30Q001S	33.61613224	-115.4581494						2,200	15			Aug-61	12	2188					
06S/17E-03M01								Yes	568	818			Apr-61	190	378					
06S/17E-03M01S	006S017E03M001S	33.67641019	-115.2935878						568	818			Apr-61	190	378					
06S/17E-03M01S	006S017E03M001S	33.67641019	-115.2935878						568	818			Apr-61	190	378					
06S/19E-28R01S	006S019E28R001S	33.6130791	-114.9955244						354				Sep-90	81	273					
06S/19E-28R01S	006S019E28R001S	33.6130791	-114.9955244						354				Sep-90	82	272					
06S/19E-28R01S	006S019E28R001S	33.6130791	-114.9955244						354				Feb-82	81	273					
06S/19E-32K01S	006S019E32K001S	33.59406264	-115.0190092						390				Feb-82	104	286					
06S/19E-32K01S	006S019E32K001S	33.59406264	-115.0190092						390				Mar-00	97	293					
06S/19E-32K02S	006S019E32K002S	33.5941904	-115.0196919						390				Feb-82	110	280					
06S/20E-33C01S	006S020E33C001S	33.61092086	-114.9013548						392				Sep-90	134	258					
06S/20E-33C01S	006S020E33C001S	33.61022386	-114.9013528						392				Feb-82	135	257					
06S/20E-33L01S	006S020E33L001S	33.60465735	-114.9017948						384	800			Feb-82	128	262					
07S/18E-14F01S	007S018E14F001S	33.56214983	-115.073692						563	1,003			Dec-82	300	263					
07S/18E-14F01S	007S018E14F001S	33.56214983	-115.073652						563	1,000			Feb-82	270	293					
07S/18E-14F01S	007S018E14F001S	33.56214983	-115.073692						563	1,000			Mar-00	270	293					
07S/18E-14H01S	007S018E14H001S	33.56226096	-115.0650739						546	985			Jan-83	270	276					
07S/18E-14H01S	007S018E14H001S	33.56226096	-115.0650739						546	985			Feb-82	258	288					
07S/18E-14H01S	007S018E14H001S	33.56226096	-115.0650739						546	985			Mar-00	257	289					
07S/19E-04R01S	007S019E04R001S	33.5849549	-114.9955658						424				Sep-90	144	280					
07S/19E-04R01S	007S019E04R001S	33.5849549	-114.9955658						424				Mar-00	144	279					
07S/20E-04R01S	007S020E04R001S	33.5839133	-114.8910784						418				Jun-81	152	266					
07S/20E-04R01S	007S020E04R001S	33.5839133	-114.8910784						418				Oct-61	151	267					

Table -1 Groundwater Elevation from Selected Wells in the Project Vicinity (12-23).xlsx 1/5/2011

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COMMENT SET F001, CONT.
ENXCO

F001-208 c

WELLS DATABASE
PROJECT BEACON

WELL DATA[a]									WELL COMPLETION DATA				GROUNDWATER LEVELS			WELL PERFORMANCE DATA[a]				COMMENTS
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Well Owner	Purpose Use	Year	Status (op)	Lithologic Log (Y/N)	Ground Surface Elevation	Total Depth	Well Diameter	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Pump Model	Pumping Test Date	Pumping Rate	Specific Capacity	
		NAD 83	NAD 83						feet-msl	feet-bgs	inches		Date	feet-bgs	feet-msl	(Hp)	Mo/Yr	gpm	gpm/ft	
07S/20E-04R01S	007S020E04R001S	33.5839133	-114.8910764						418				Nov-61	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839133	-114.8910764						418				Jan-62	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839133	-114.8910764						418				Mar-62	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839133	-114.8910764						418				Apr-62	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839133	-114.8910764						418				May-62	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839133	-114.8910764						418				Oct-62	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839133	-114.8910764						418				Mar-63	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839133	-114.8910764						418				Oct-63	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839133	-114.8910764						418				Mar-64	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839133	-114.8910764						418				Nov-64	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839133	-114.8910764						418				Mar-65	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839133	-114.8910764						418				Nov-65	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839133	-114.8910764						418				Mar-66	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839133	-114.8910764						418				Oct-66	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839133	-114.8910764						418				Mar-67	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839133	-114.8910764						418				Oct-67	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839133	-114.8910764						418				Oct-69	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839133	-114.8910764						418				Apr-70	151	267					
07S/20E-16M01S	007S020E16M001S	33.5591308	-114.9053349						456	1,200			Jun-05	202	254					
07S/20E-16M01S	007S020E16M001S	33.5591308	-114.9053349						458	1,200			Sep-80	208	250					
07S/20E-16M01S	007S020E16M001S	33.5591308	-114.9053349						456	1,200			Feb-82	207	249					
07S/20E-16M01S	007S020E16M001S	33.5591308	-114.9053349						456	1,200			Feb-83	206	250					
07S/20E-17C01S	007S020E17C001S	33.5649348	-114.9186326						433				Feb-82	174	259					
07S/20E-17G01S	007S020E17G001S	33.5644973	-114.9155269						444	1,200			Dec-57	203	241					
07S/20E-17G01S	007S020E17G001S	33.5644973	-114.9155269						444	1,200			Sep-80	190	254					
07S/20E-17G01S	007S020E17G001S	33.5644973	-114.9155269						444	1,200			Feb-82	187	257					
07S/20E-17G01S	007S020E17G001S	33.5644973	-114.9155269						444	1,200			Feb-82	188	256					
07S/20E-17G01S	007S020E17G001S	33.5644973	-114.9155269						444	1,200			Mar-00	200	244					
07S/20E-17K01S	007S020E17K001S	33.5591885	-114.9121462						457	1,200			Dec-57	205	252					
07S/20E-17K01S	007S020E17K001S	33.5591885	-114.9121462						457	1,200			Feb-82	201	256					
07S/20E-17K01S	007S020E17K001S	33.5591885	-114.9121462						457	1,200			Feb-82	200	257					
07S/20E-17K01S	007S020E17K001S	33.5591885	-114.9121462						457	1,200			Feb-82	200	257					
07S/20E-17L01S	007S020E17L001S	33.5582247	-114.9292159						458	1,200			Oct-92	213	245					
07S/20E-18H01S	007S020E18H001S	33.5625251	-114.926355						443	1,139			Apr-61	168	275					
07S/20E-18H01S	007S020E18H001S	33.5625251	-114.926355						443	1,139			Apr-78	172	271					
07S/20E-18H01S	007S020E18H001S	33.5625251	-114.926355						443	1,139			Jun-79	173	270					
07S/20E-18H01S	007S020E18H001S	33.5625251	-114.926355						443	1,139			Jul-80	169	274					
07S/20E-18H01S	007S020E18H001S	33.5625251	-114.926355						443	1,139			Jan-81	169	274					
07S/20E-18H01S	007S020E18H001S	33.5625251	-114.926355						443	1,139			Sep-81	169	274					
07S/20E-18H01S	007S020E18H001S	33.5625251	-114.926355						443	1,139			Mar-82	170	273					
07S/20E-18H01S	007S020E18H001S	33.5625251	-114.926355						443	1,139			Jan-83	171	272					
07S/20E-18H01S	007S020E18H001S	33.5625251	-114.926355						443	1,139			Jul-84	171	272					
07S/20E-18H01S	007S020E18H001S	33.5625251	-114.926355						443	1,139			Feb-85	171	272					

Table -1 Groundwater Elevation from Selected Wells in the Project Vicinity (12-23) xlsx1/5/2011

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COMMENT SET F001, CONT.
ENXCO

F001-208 cont.

WELLS DATABASE
PROJECT BEACON

WELL DATA[1]									WELL COMPLETION DATA				GROUNDWATER LEVELS			WELL PERFORMANCE DATA[2]				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Well Owner	Purpose Use	Year	Status (op)	Lithologic Log (Y/N)	Ground Surface Elevation	Total Depth	Well Diameter	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Pump Model	Pumping Test Date	Pumping Rate	Specific Capacity	COMMENTS
		NAD 83	NAD 83						feet-msl	feet-bgs	inches		Date	feet-bgs	feet-msl	(Hp)	Mo/Yr	gpm	gpm/ft	
07S/20E-18H01S	007S020E18H001S	33.5825251	-114.926355						445	1,138			Jun-85	173	270					
07S/20E-18H01S	007S020E18H001S	33.5825251	-114.926355						413	1,139			Feb-82	153	258					
07S/20E-18K01S	007S020E18K001S	33.5808363	-114.9319892						449	1,200			Oct-92	192	256					
07S/20E-18R01S	007S020E18R001S	33.5573475	-114.9270487						454	1,190			Oct-92	202	252					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						509	830			Mar-82	248	258					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Feb-82	232	272					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Mar-00	235	271					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						509	830			Oct-00	238	271					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Jan-01	235	271					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Feb-01	234	271					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Apr-01	235	271					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						504	830			Apr-01	236	271					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Jul-01	235	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						504	830			Nov-01	234	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Nov-01	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						509	830			Apr-02	235	271					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						504	830			Apr-02	235	271					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						509	830			Oct-02	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Oct-02	238	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						509	830			Jan-03	238	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Jun-03	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Nov-03	236	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						509	830			Nov-03	238	268					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						504	830			Mar-04	234	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Mar-04	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						509	830			Aug-04	238	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						504	830			Dec-04	235	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						509	830			Apr-05	235	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						509	830			Aug-05	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Aug-05	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						509	830			Feb-06	238	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Feb-06	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			May-06	236	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						509	830			May-06	236	268					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						504	830			Aug-06	237	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Aug-06	237	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						509	830			Dec-06	237	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						509	830			Dec-06	237	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Feb-07	238	268					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						504	830			Feb-07	236	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						509	830			May-07	237	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			May-07	237	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						508	830			Sep-07	237	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						509	830			Sep-07	237	269					

Table -1 Groundwater Elevation from Selected Wells in the Project Vicinity (12-23).xlsx 1/5/2011

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WELLS DATABASE
PROJECT BEACON

WELL DATA[1]									WELL COMPLETION DATA				GROUNDWATER LEVELS			WELL PERFORMANCE DATA[2]				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Well Owner	Intended Use	Year	Status (op)	Lithologic Log (Y/N)	Ground Surface Elevation	Total Depth	Well Diameter	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Pump Model	Pumping Test Date	Pumping Rate	Specific Capacity	COMMENTS
		NAD 83	NAD 83						feet-msl	feet-bgs	inches		Date	feet-bgs	feet-msl	(Hp)	Mo/Yr	gpm	gpm/ft	
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Sep-07	237	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Dec-07	237	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Dec-07	237	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Mar-08	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Mar-08	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Mar-08	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Jun-08	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Jun-08	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Sep-08	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Sep-08	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Sep-08	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Jan-09	235	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Jan-09	235	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Apr-09	235	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Apr-09	235	270					
07S/20E-28C02S	007S020E28C002S	33.5372481	-114.8989955						505	1,008			Nov-09	234	271					

NOTES

1	Data as provided in the USGS National Water Information System Database - http://nwis.waterdata.usgs.gov/ and the Department of Water Resources Database - http://wdl.water.ca.gov/gw/
2	Data obtained by historical documents

DEFINITIONS

NAD-83	North American Datum 1983
feet-msl	feet above mean sea level
feet-bgs	feet below ground surface
Mo	month
gpm	gallons per minute
gpm/ft	gallons per minute per foot of drawdown
--	data not provided or available in USGS or DWR database.

Table -1 Groundwater Elevation from Selected Wells in the Project Vicinity (12-23).xlsx 1/5/2011

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COMMENT SET F001, CONT.
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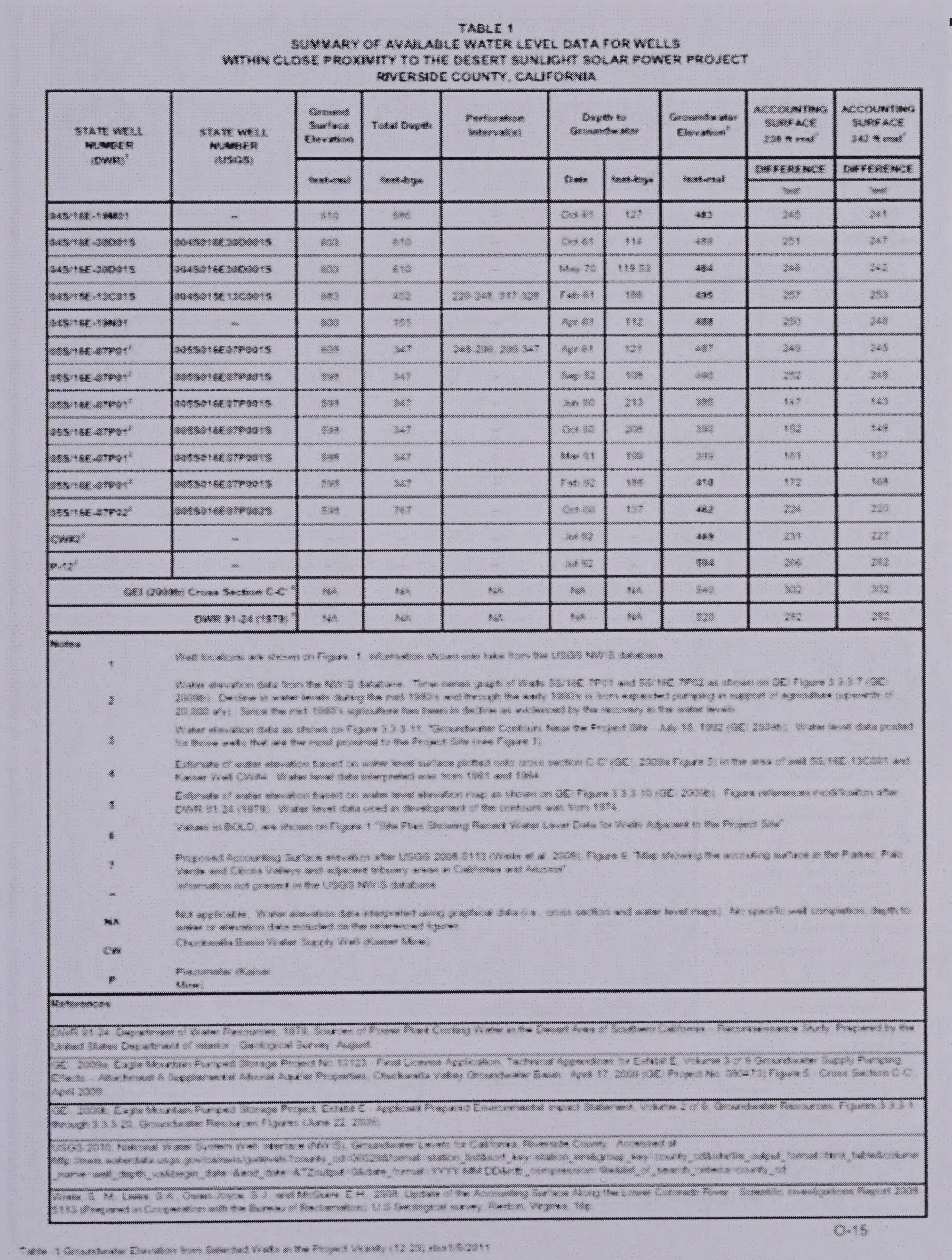

TABLE 1
SUMMARY OF AVAILABLE WATER LEVEL DATA FOR WELLS
WITHIN CLOSE PROXIMITY TO THE DESERT SUNLIGHT SOLAR POWER PROJECT
RIVERSIDE COUNTY, CALIFORNIA

STATE WELL NUMBER (DWR)[1]	STATE WELL NUMBER (USGS)	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation[6]	ACCOUNTING SURFACE 238 ft msl[7]	ACCOUNTING SURFACE 242 ft msl[7]
		feet-msl	feet-bgs		Date	feet-bgs	feet-msl	DIFFERENCE feet	DIFFERENCE feet
04S/16E-19M01	--	610	586	--	Oct 61	127	**483**	245	241
04S/16E-30D01S	004S016E30D001S	603	610	--	Oct 61	114	489	251	247
04S/16E-30D01S	004S016E30D001S	603	610	--	May 70	119.53	**484**	246	242
04S/15E-13C01S	004S015E13C001S	683	402	220-245, 317-328	Feb 61	188	**495**	257	253
04S/16E-19N01	--	600	181	--	Apr 61	112	**488**	250	246
05S/16E-07P01[2]	005S016E07P001S	608	347	245-290, 299-347	Apr 61	121	487	249	245
05S/16E-07P01[2]	005S016E07P001S	598	347	--	Sep 52	108	490	252	248
05S/16E-07P01[2]	005S016E07P001S	598	347	--	Jun 80	213	385	147	143
05S/16E-07P01[2]	005S016E07P001S	598	347	--	Oct 88	208	390	152	148
05S/16E-07P01[2]	005S016E07P001S	598	347	--	Mar 91	199	399	161	157
05S/16E-07P01[2]	005S016E07P001S	598	347	--	Feb 92	188	**410**	172	168
05S/16E-07P02[2]	005S016E07P002S	598	767	--	Oct 08	137	**462**	224	220
CWK2[3]	--	--	--	--	Jul 92	--	**469**	231	227
P-12[3]	--	--	--	--	Jul 92	--	**504**	266	262
GEI (2009a) Cross Section C-C'[4]		NA	NA	NA	NA	NA	540	302	302
DWR 91-24 (1979)[5]		NA	NA	NA	NA	NA	520	282	282

Notes

1	Well locations are shown on Figure 1. Information shown was take from the USGS NWIS database.
2	Water elevation data from the NWIS database. Time series graph of Wells 5S/16E-7P01 and 5S/16E-7P02 as shown on GEI Figure 3.3.3-7 (GEI 2009b). Decline in water levels during the mid 1980's and through the early 1990's is from expanded pumping in support of agriculture (upwards of 20,000 af/y). Since the mid 1990's agriculture has been in decline as evidenced by the recovery in the water levels.
3	Water elevation data as shown on Figure 3.3.3-11, "Groundwater Contours Near the Project Site - July 15, 1992 (GEI 2009b). Water level data posted for those wells that are the most proximal to the Project Site (see Figure 1).
4	Estimate of water elevation based on water level surface plotted onto cross section C-C' (GEI 2009a Figure 5) in the area of well 5S/16E-13C001 and Kaiser Well CW#4. Water level data interpreted was from 1981 and 1984.
5	Estimate of water elevation based on water level elevation map as shown on GEI Figure 3.3.3-10 (GEI 2009b). Figure references modification after DWR 91-24 (1979). Water level data used in development of the contours was from 1974.
6	Values in BOLD are shown on Figure 1 "Site Plan Showing Recent Water Level Data for Wells Adjacent to the Project Site"
7	Proposed Accounting Surface elevation after USGS 2008-5113 (Wiele et al. 2009), Figure 6 "Map showing the accounting surface in the Parker, Palo Verde and Cibola Valleys and adjacent tributary areas in California and Arizona"
--	Information not present in the USGS NWIS database.
NA	Not applicable. Water elevation data interpreted using graphical data (i.e., cross section and water level maps). No specific well completion, depth to water or elevations data included on the referenced figures.
CW	Chuckwalla Basin Water Supply Well (Kaiser Mine)
P	Piezometer (Kaiser Mine)

References

DWR 91-24. Department of Water Resources. 1979. Sources of Power Plant Cooling Water in the Desert Area of Southern California - Reconnaissance Study. Prepared by the United States Department of Interior - Geological Survey. August.

GEI. 2009a. Eagle Mountain Pumped Storage Project No. 13123 - Final License Application, Technical Appendices for Exhibit E, Volume 3 of 6 Groundwater Supply Pumping Effects - Attachment A Supplemental Alluvial Aquifer Properties, Chuckwalla Valley Groundwater Basin. April 17, 2009 (GEI Project No. 080473) Figure 5 - Cross Section C-C', April 2009.

GEI. 2009b. Eagle Mountain Pumped Storage Project, Exhibit E - Applicant Prepared Environmental Impact Statement, Volume 2 of 6, Groundwater Resources, Figures 3.3.3-1 through 3.3.3-20, Groundwater Resources Figures (June 22, 2009).

USGS 2010. National Water System Web Interface (NWIS), Groundwater Levels for California, Riverside County. Accessed at [illegible]

Wiele, S. M., Leake, S.A., Owen-Joyce, S.J., and McGuire, E.H., 2008. Update of the Accounting Surface Along the Lower Colorado River. Scientific Investigations Report 2008-5113 (Prepared in Cooperation with the Bureau of Reclamation). U.S Geological survey, Reston, Virginia, 16p.

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Table 1 Groundwater Elevation from Selected Wells in the Project Vicinity (12 23).xlsx1/5/2011

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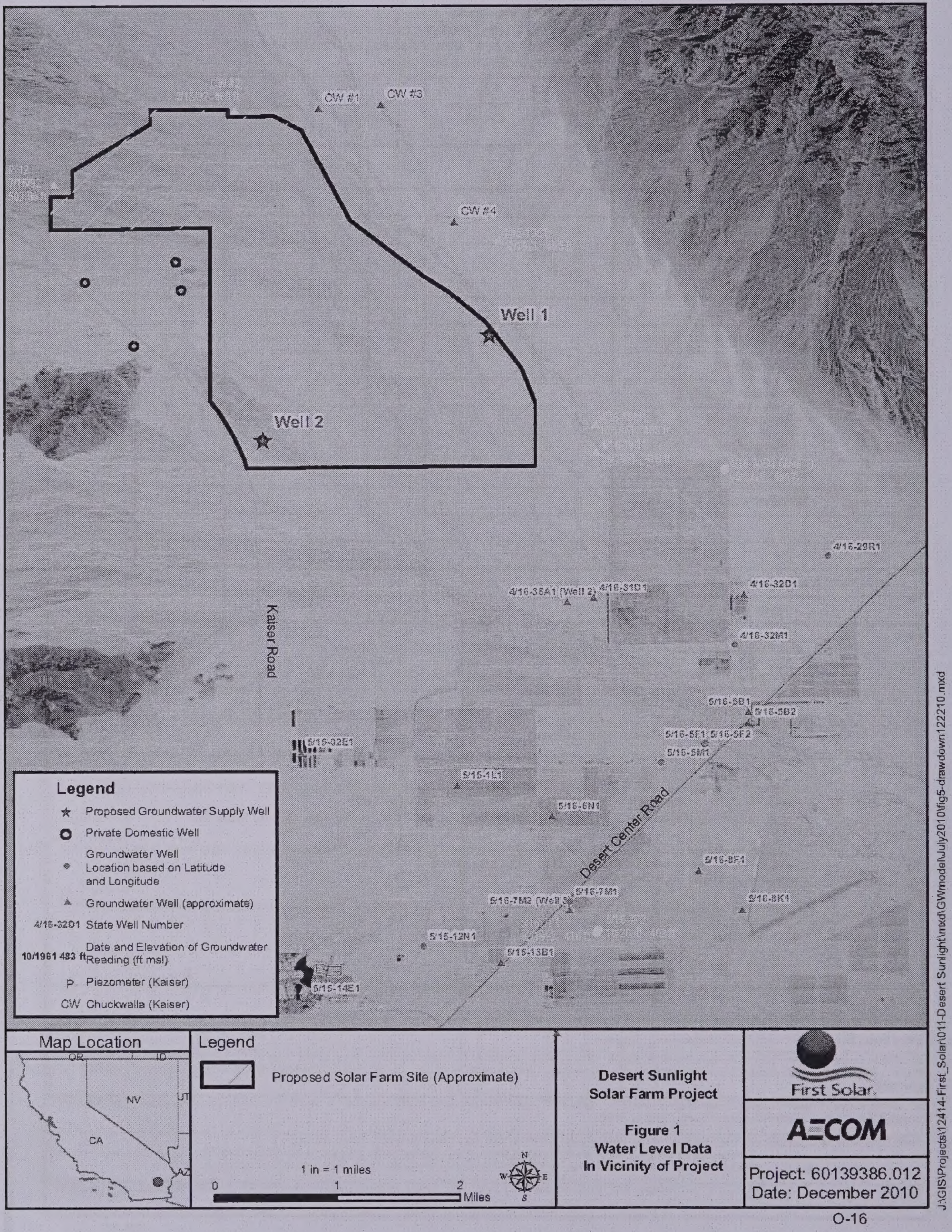

Appendix N

Responses to Comments on the Draft EIS

This appendix provides comprehensive responses to all comments received by the BLM on the Draft EIS. The alphanumerical codes below correspond to the codes found in the letters in Appendix M. The comment responses that follow are organized by resource.

AIR RESOURCES

A004-10 The commenter states that either Draft EIS Table 3.2-4 or the preceding paragraph (page 3.2-12) is in accurate because the table shows an exceedance of the federal 8-hour ozone standard and the paragraph states that there are no federal exceedances.

The Final EIS includes revisions to Table 3.2-4 and the preceding text to update the data based on records available from the California Air Resources Board (CARB) website, and to identify the measurements over the Federal ozone standard. An exceedance is not necessarily related to a violation of the standard or a nonattainment condition. The attainment designations that are established by the (U.S. Environmental Protection Agency (USEPA) in Table 3.2-5 are unaffected by the revision.

A004-17 The commenter questions whether the regional and local “significance” thresholds in Draft EIS page 4.2-7 are based on project emissions before or after mitigation measures are applied? The decommissioning section states that the area will be returned to its original condition; commenter states that this is unlikely and would take hundreds of years and recommends that this section be rewritten.

Significance thresholds shown in Table 4.2-1 and Table 4.2-2 are levels indicating a need for mitigating action under CEQA, and the discussion of the CEQA Significance Determination notes where emission levels after mitigation would exceed the thresholds.

The discussion of impacts of decommissioning in Section 4.2 is related solely to Air Resources. From an Air Resources emissions perspective, the site would be returned to its original condition after emissions from decommissioning activities cease. Long-term visual and biological effects are described in Sections 4.19, 4.2, and 4.3 of the Draft EIS. No changes to the EIS are warranted as a result of this comment.

A004-25 The commenter notes a possible inconsistency in an air quality table in the Draft EIS.

See response to Comment A004-10.

A004-33 The commenter questions the Draft EIS's discussion of air quality thresholds.

See response to Comment A004-17.

A004-34 The commenter questions the origin of the wind speed numbers in MM AIR-1 (Draft EIS page 4.2-8), noting that wind speeds of 25 to 30 mph seems to be a high threshold to trigger action.

Wind speeds under 25 mph would not be as likely to cause excessive dust, and 25 mph is a wind speed that serves as a typical action level, as found in Southern California Air Quality Management District (SCAQMD) Rule 403 (a "high wind condition") and in the Western Regional Air Partnership Fugitive Dust Handbook (2006).

A004-35 The commenter requests that MM AIR-1 include a requirement for the project owner to install PM10 dust monitoring equipment where data trigger a response when particulate standards are exceeded, and requests that real-time data be made available via the Internet for offsite monitoring. The commenter requests that monitoring and dust abatement be continued through the weekend and holidays.

The requested change has been incorporated into the Final EIS.

A004-36 The commenter states that MM AIR-2 should state the maximum idling time allowed, and recommends less than one minute or no idling.

The mitigation would limit idling, allowing for operator discretion on when safety or other considerations warrant some idling. In addition to the mitigation, heavy-duty vehicles would be subject to CARB requirements limiting idling generally to five minutes.

A004-37 The commenter questions whether pavement is necessary, and whether more paved roads or more dust is "worse," in regard to Mitigation Measure MM AIR-3.

The mitigation would ensure pavement is used for the most heavily-traveled access road, and this would ensure that the most frequent and routine travel is confined to a paved area. Other areas would be treated with water or soil stabilizers to minimize unnecessarily large new areas of pavement.

A004-38 The commenter states that the last sentence on Draft EIS page 4.2-10 has a typo; it should be Alternative 4 not 5.

The requested change has been incorporated into the Final EIS.

A008-13 The commenter suggests using phased grading to minimize impacts from fugitive dust (Draft EIS at page 4.2-8).

Section 4.2 (Air Quality) in the EIS includes the following Applicant Measure (AM) AQ-4: "Construction activity will be phased across the Solar Project site in a manner that would minimize the area disturbed on any single day." This would minimize fugitive dust.

A010-3 The commenter, EPA, recommends more stringent air quality mitigation measures, phased construction, and early coordination among multiple renewable energy project construction schedules to minimize adverse air quality impacts in the region.

Mitigation measures have been incorporated into the EIS to ensure minimization and avoidance of effects to air resources, including cumulative effects. No changes to the EIS are warranted as a result of this comment.

A010-16 EPA states concern for direct, indirect, and cumulative impacts of construction and fugitive dust emissions associated with the project, even after mitigation measures have been taken into account. EPA states that the project's characteristics and the surrounding projects necessitate that all feasible measures should be implemented to reduce and mitigate air quality impacts to the greatest extent possible. EPA makes recommendations for additional mitigation measures (MMs) to be included in the Final EIS including a MM enforcement schedule, a consideration of reduced vegetation clearing in Alternative 7, use of local distribution line rather than mobile generators, emissions tables for on-road and non-road engines, expected availability of Tier 3 and 4 engines and a commitment to Tier 4 standards when possible, and implementation of mobile source and administrative controls on emissions.

The comment provides suggestions to minimize construction equipment emissions. Equipment using large engines (over 750 hp) meeting Tier 4 would only be available for model year 2011 or later. The Final EIS considers the suggested controls and includes additional detailed mitigation to ensure that construction contracts would include the best available emission control technologies to minimize these impacts.

A010-17 EPA states that the Draft EIS does not analyze the combined emissions that would result from concurrent construction with other projects, including Desert Sunlight and Eagle Mountain Pumped Storage. EPA recommends including this analysis and be used to develop a phased construction schedule to reduce construction overlap across projects and not exceed air quality standards. EPA requests that the Final EIS provide technical justification for any determination that a projects is too far from the proposed project to contribute to cumulative air quality impacts and discuss additional mitigation measures necessary based on the evaluation of cumulative emissions.

The schedules of the cumulative projects are not known at this time, and developing an analysis of the combined emissions would require speculation of construction schedules that are beyond the control of BLM. Generally, other projects would not overlap. The Draft EIS describes that construction emissions occur near the ground level. The Draft EIS considers that other cumulative construction projects could involve various construction sources that would be mobile and the release heights of the mobile sources would near enough to the ground that additional technical detail would not be necessary to support the Draft EIS conclusion that temporary significant and unavoidable impacts would occur. The Final EIS includes additional detailed mitigation to ensure that construction contracts would include the best available emission control technologies to minimize these impacts.

A012-6 The commenter recommends that the project implement phased grading (grading only portions of the project site scheduled for immediate construction) to minimize fugitive dust.

Please see response to Comment A008-13.

B005-5 The commenter requests that the project owner develop air quality monitoring stations or share responsibility with the Desert Sunlight Solar Farm (DSSF) project. The commenter further critiques the geographic scope of cumulative analysis for air resources as presented in the Draft EIS.

The air resources effects of the DHSP are almost strictly during construction. Construction activities cause emissions that are released near the ground and at low vertical velocities (meaning that the construction-phase impacts are greatest near the fence-line because the pollutants are not sent high aloft. Compared to a fossil-fueled power plant that sends operational emissions in a plume high above the ground (year after year), this project would have a lower elevation and smaller geographic impact, with little or no effects beyond six miles. Therefore, a 6-mile radius is a reasonable geographic scope of analysis. In addition, the Final EIS includes clarification of mitigation that will ensure dust monitoring stations are provided and that there would be no net increase in ambient dust conditions in the Park as a result of the project (see Final EIS Section 4.2.6 under the heading "Mitigation Measures").

B008-14 The commenter states that the viewsheds in the project area historically have been pristine with in frequent dust storms. The commenter states that dust events are now frequent due to the Desert Sunlight project, and airborne dust is constant despite good faith efforts by Desert Sunlight. The commenter states that Desert Sunlight's clearing of large swaths (1000 acres) at a time has helped create this dust problem, and the project owner should construct the project in 100-acre chunks to avoid the same issues. The commenter requests that DHSP install air quality monitoring for a variety of pollutants prior to construction. The commenter states that the Charpied (commenter's) jojoba farm will be ruined by increased dust issues, which introduce spider mites and create aborted jojoba seeds, and states that this represents illegal action by the BLM that could result in litigation.

See response to Comment A008-13.

B010-3 The commenter recommends mitigation to prevent dust plumes to migrate across the project site to the Desert Sunlight site.

Mitigation Measure MM AIR-1 requires a fugitive dust control plan that will minimize dust to below specific performance thresholds. There may be dust that migrates to the adjacent project site, but project dust will be required to have no effect to baseline conditions in Joshua Tree National Park, located 1.7 miles away. No changes to the EIS are warranted as a result of this comment.

D002-5 The commenter states that ozone, PM10, and PM2.5 levels in the Park are in a state of non-attainment. The commenter further states that the DHSP will exacerbate these conditions.

A full analysis of air resources effects is presented in Section 4.2. An analysis of air resources effects to the Park are presented in Section 4.17. No changes to the EIS are warranted as a result of this comment.

D002-6 The commenter states that the Desert Sunlight Solar Farm project construction mitigation has not been effective at controlling dust and should be improved for the Desert Harvest Solar Project.

Mitigation Measures in the EIS will ensure that air resources effects are minimized. Implementation of dust monitoring required in MM AIR-1 will ensure that dust conditions are improved.

E007-1 The commenter states that dust emissions in arid areas are a significant source of PM10 pollution, and recommends a study of dust generated by wind striking the solar panels at a particular angle.

The solar arrays would introduce structures to the landscape that would be up to 15 feet tall and would allow for wind flow around and below the panels. The wind that travels over and through the panel arrays would experience a reduction in overall energy as it would be obstructed by the arrays. Due to the limited height of the panels, changes in the micro-meteorology would be limited to areas only very near the structures. Structures that are fixed to the ground with no surface wind flow underneath can affect the aerodynamic turbulence levels near the structure and downwind, but these effects occur generally within 10 x of the height of the structure, and no more than 30 x of the height of the structure (R. N. Meroney in Engineering Meteorology, Turbulent Diffusion Near Buildings, 1982). For the proposed arrays of panels (at up to 15 feet), surface winds would not be affected at any location greater than 450 feet from the array meaning that these effects would be confined to the site and its boundaries. Wind erosion from the site would be subject to control under the recommended mitigation (MM AIR-3). No changes to the EIS are warranted as a result of this comment.

F001-1 The commenter states that in some instances, the CEQA significance determination in Table ES-1 does not correspond with conclusions in Chapter 4. The commenter states that Impact Criterion AR-2 does not pertain solely to emissions that would have residual impacts but rather directs the analysis to consider whether project emissions contribute to an existing or projected air quality violation. As such, the Applicant states that the CEQA Significance Determination concludes that the proposed project would have temporary significant and unavoidable NOx and PM10 impacts during construction [Draft EIS at page 4.2-26]; VOC and CO should be deleted from Tables ES-1 and 4.24-2.

The Executive Summary of the EIS has been clarified to show that AR-2 and AR-3 describe significant unavoidable impacts for the various pollutants identified in Section 4.2.

ALTERNATIVES

A004-21 The commenter states that the National Park Service (NPS) fully supports the use of low-height tracking systems.

The Draft EIS evaluates 3 alternatives that use low-height tracking systems as described in Chapter 2. All comments will be considered by the decision-maker prior to making a decision. In addition, see response to Comment A004-5.

A010-11 EPA recommends that for Alternative 7, BLM evaluate and quantify the potential to design panels such that the need for grading and clearing of the site is reduced, thus reducing impacts related to vegetation, drainage, and dust. EPA recommends comparing these results to existing alternatives and integrating them into the rest of the document.

BLM has evaluated 2 panel design options proposed by the Applicant. Evaluation of further panel design options is not warranted.

B005-2 The commenter does not support the project in its current location, less than 2 miles from the Park. The commenter cites effects on Park resources, including glare from articulating panels and night lighting from on-site lights.

See response to Comment A004-5. All comments will be considered by the decision-maker when making a decision on the project.

B006-36 The commenter states that if BLM rejects an alternative from consideration, it must explain why a particular option is not feasible and was therefore eliminated from further consideration. The commenter states that in the Draft EIS BLM too narrowly construed the project purpose and need such that the Draft EIS did not consider an adequate range of alternatives to the proposed project, and that additional feasible alternatives should be considered which would avoid all desert tortoise habitat, phase construction, and site the project on degraded land.

Both private land alternatives and contaminated land alternatives were considered in the EIS, and both were rejected as infeasible, with a complete rationale provided for each. The private land described on page 2-69 of the Draft EIS would have the technical potential to be developed for solar energy. However, the private land alternative would require use of semi-contiguous parcels and the aggregation of numerous parcels owned by numerous separate individuals. Due to the small parcels and scattered ownership, it would be difficult and expensive, if not impossible, to acquire sufficient contiguous acreage for the project, making a private land alternative technically and economically infeasible. In addition, under NEPA a private land alternative does not respond to BLM's purpose of and need for the proposed project, namely, to consider an application for the authorized use of public lands for a solar facility, which could include requesting modifications to the proposal that are within BLM's jurisdiction. As with the private land alternatives described above, it would be technically possible to develop solar energy on the contaminated sites (see page 2-70 of the Draft EIS). However, the aggregated sites would not be sufficiently large for a 150 MW project. Due to the limited number of contaminated parcels near the Devers–Palo Verde Corridor, it would be impossible to acquire sufficient contiguous or semi-contiguous contaminated acreage for the project, making a contaminated land alternative technically and economically infeasible.

B006-37 The commenter states that alternative siting on previously degraded lands, distributed solar alternatives, and other alternatives that could avoid impacts of the proposed project as well as impacts of the associated transmission line gen-tie and the new substation were not considered in the Draft EIS. The commenter adds that the BLM should have looked at alternatives for construction and operations that would reduce greenhouse gas (GHG) emissions through offsets or other means.

See response to Comment B006-36. With regard to alternative methods of GHG reduction or offsets, pages 2-74 and 2-75 evaluated a conservation and demand-side management alternative, which are two GHG management strategies. Conservation and demand-side management were eliminated from detailed discussion because they would be too great a departure from the application to be considered a modification of the Applicant's proposal, and so are ineffective under NEPA. This alternative would not respond to the BLM's purpose and need for the Proposed Action, which is to respond to the application for a right-of-way (ROW) grant to construct, operate, and decommission a solar photovoltaic facility on public lands in compliance with the Federal Land Policy and Management Act (FLPMA), BLM ROW regulations, and other federal applicable laws. Conservation and demand-side management would also not respond to the purpose and need to address the Energy Policy Act of 2005's goal for the Secretary of the Interior to approve 10,000 MW of non-hydropower renewable energy projects located on public lands. Additionally, the BLM has no jurisdiction over conservation and demand-side management programs. With population growth and increasing demand for energy, there is no evidence that conservation and demand-management alone would be sufficient to address all of California's energy needs. Further, affecting consumer choice to the extent necessary for a conservation and demand-side management solution is beyond the BLM's or the project owner's control.

B006-38 The commenter states that the Draft EIS failed to consider any off-site alternative that would significantly reduce the impacts to biological resources including desert tortoise habitat, key movement corridors, golden eagles, occupied desert kit fox habitat, crucifixion thorn and others. The commenter states that because such alternatives are feasible, on this basis and other the range of alternatives is inadequate, and the commenter urges the BLM to re-circulate a revised or supplemental Draft EIS for public comment or reject the ROW application and plan amendment.

The Draft EIS considers several alternatives that would significantly reduce impacts to biological resources, including those mentioned in the comment. Section 2.17.1 (page 2-68) specifically addressed an alternative to reduce wildlife movement. Section 2.17.2 (page 2-69) considered a contaminated sites alternative. Section 2.17.4 (page 2-71) considered distributed and rooftop photovoltaics. Section 2.17.7 (page 2-74) considered a conservation and demand-side management. The latter three of these would significantly reduce effects to biological resources, but were determined to be infeasible. The wildlife movement alternative would not provide benefits to wildlife movement, and was therefore not carried forward for detailed analysis. Recirculation of the document is not warranted as a result of this comment.

B007-1 The commenter states that as an agency in the executive branch of the Federal Government, the BLM must implement NEPA's procedural requirements, including consideration of alternatives to the DHSP. The commenter points out that other energy generation systems, including distributed generation, the No Project alternative, and alternate solar sites closer to load centers must be considered on the basis of environmental, reliability, and national security concerns.

Chapter 2, Project Description, provides a description of project alternatives considered, including alternatives eliminated from detailed consideration. Distributed generation and rooftop photovoltaic alternatives are discussed specifically in Section 2.17.4. The feasibility of such alternatives is considered, but ultimately "alternatives involving distributed generation were eliminated from detailed analysis because it does not respond to the BLM's purpose and need for the Proposed Action." Section 2.17.2 describes BLM's consideration of alternate sites on both BLM and private land, ultimately dismissed due to technical, logistical, or economic infeasibility. In eliminating these alternatives, BLM has conducted its review in compliance with NEPA and other relevant federal laws, as further described in the respective sections.

The merits and potential impacts of the No Project alternative are considered in each section of Chapter 4, along with the retained action alternatives. No changes have been made to the document.

B007-2 The commenter states that BLM should consider an array of topics in comparing alternatives, including transmission losses, corona effects of high voltage transmission lines, increased raven roosting and subsequent desert tortoise predation associated with transmission towers, vegetation clearance beneath transmission towers, Sulfur Hexafluoride (SF6) leakage and GHG emissions, and relocation of desert tortoise at the project site.

BLM analyzes a variety of environmental effects, including those listed by the commenter, of retained alternatives in Chapter 4, pursuant to NEPA. These chapters provide mitigation measures to reduce environmental effects, such as those identified by the commenter, to the fullest extent possible. BLM is not required to analyze the environmental effects of alternatives eliminated from consideration. Section 2.17 provides rationale for the elimination of several alternatives identified by the commenter. Distributed Generation was considered but eliminated from analysis as described in Section 2.17.4. It was eliminated due to its potential inability to meet RPS within the required time frame, its inability to meet future U.S. energy needs without additional energy from large-scale projects, and because it does not respond to the project's purpose and need, the importance of which is described in the introduction of Section 2.17. The introduction of Section 2.17 provides further information on the laws and regulations that guide elimination and adoption of alternatives. No changes have been made to the document.

B007-3 The commenter states that BLM should consider the many effects of construction when comparing alternatives, including the destruction of Desert Varnish, GHG emissions associated with a commuting workforce, ravens and subsequent desert tortoise predation associated with increased garbage, increased offsite vehicle road trips, a project batch plant and water and concrete trucking, and increased

Off-Road Vehicles (ORV) use. The commenter states that the impacts listed in this comment and Comment B007-2 can be avoided through the use of distributed energy generation, and that a distributed energy generation alternative must be evaluated in detail.

See response to Comment B007-2. Project scientists have not identified desert varnish as a significant source of carbon sequestration or habitat element for plants and wildlife. Section 3.5.2: Ecosystem Carbon Storage, describes BLM's rationale in considering desert soil in the project area to have a minor capacity for carbon storage and climate change buffering. Special status plants, wildlife, habitats, and communities are identified and analyzed in Sections 4.3 and 4.4. No changes to the document have been made.

B007-4 The commenter states that the alternatives should be compared in terms of their vulnerability to natural disasters, vandalism and theft, sabotage, and the Carrington Effect (solar storms). The commenter states that distributed energy's exposure to these risks is considerably lower, and its installation must be evaluated.

See response to Comment B007-2. The Carrington Effect and solar storms are not considered in the Final EIS. While such events have the potential to affect the project, a major solar storm is expected to have non-localized, grid-wide effects. The likelihood of such a major storm affecting the project remains small given the finite life of the project, and must be weighed against the legislated and imminent need to increase renewable generation in California. No changes have been made to the document (National Research Council 2008).

B008-1 The commenter provides background information on the Desert Protection Society (DPS) and Basin and Range Watch (BRW). The commenter states, in response to the BLM purpose and need provided in the Final EIS, that the BLM must provide a distinct purpose and need statement from the Applicant as required by law. The commenter states that BLM's definition of purpose and need will affect the range of project alternatives.

BLM agrees with the commenter that the purpose and need helps determine the alternatives. BLM's purpose and need in the Draft EIS is clearly defined and addresses relevant laws and goals that guide BLM management. In Section 1.2: BLM Purpose and Need, the BLM describes its purpose and need for the Draft EIS, specifically referencing legislated management goals that the project would help achieve, including goals identified in The Energy Policy Act 2005, Executive Order 13212, and Secretarial Order 3285A1. The BLM specifically describes its response to an application to "construct, operate, maintain, and decommission a solar energy–generating facility and associated infrastructure on public lands administered by the BLM in compliance with FLPMA, BLM ROW regulations, and other applicable federal laws and policies."

B008-2 The commenter states that the Draft EIS violates NEPA by failing to consider a full range of alternatives. The commenter states that according to prior case law, a federal agency may not employ criteria derived from the agency's preferred alternative to reject other reasonable alternatives and may not define alternatives in unnecessarily narrow terms. The commenter states a preference for a No Action Alternative that designates conservation status to the project site and designates the site inappropriate for solar energy development.

A full range of alternatives was considered in the Draft EIS. Certain alternatives were not carried forward for full analysis because they were shown to be infeasible, and/or they did not respond to the BLM's purpose and need for the project. Also, please see responses to Comments B006-36 and -37. The BLM did not consider an alternative that applies conservation status to the project site, as this action would require a land use plan amendment, and this option was not proposed by the Applicant so BLM has no authority to act on such a proposal at this time. Such an alternative would not meet the BLM's purpose and need. However, mitigation measure VEG-6 would require off-site compensation of habitat at a ratio of up to 3:1 for loss of special-status species habitat. The decision-maker will consider all comments regarding alternative preference in making a final decision.

B008-4 The commenter reiterates comments B008-1 and B008-2, stating that BLM must distinguish its purpose and need from the agency preferred alternative and that the Draft EIS fails to consider a reasonable range of alternatives. The commenter recommends consideration of jojoba as a renewable energy source, given its inclusion in the Congressional Critical Agricultural Materials List. The commenter offers the expertise of the Department of Public Safety (DPS) in this matter and states that previous efforts have made the project area an ideal site for jojoba cultivation. The commenter notes that unlike jojoba, the project will remove vegetation and create more environmental impacts.

Regarding the range and purpose of BLM alternatives, please see response to Comment B008-2. Regarding a jojoba alternative, the BLM has analyzed a variety of alternative renewable energy technologies in the Draft EIS, including wind, geothermal, and biomass energy. Jojoba would provide a specific form of biomass energy. Section 2.17.5: Biomass Energy states that “Biomass facilities do not require the extensive amount of land required by the other renewable energy sources discussed, but they generate much smaller amounts of electricity. Most biomass plant capacities are in the 3 to 10 MW range.” This energy output would be too small to meet the project needs. Additionally, while the BLM recognizes jojoba's listing as a Critical Agricultural Material, jojoba is not a proven energy resource at the utility scale.

B008-5 The commenter states that distributed generation in the built environment should be fully analyzed as a viable alternative. The commenter states that this alternative would be as functional and feasible as the proposed project but with reduced environmental consequences to the carbon-storing ability of healthy desert ecosystems, to biological soil crusts, and to existing unfragmented habitats of protected, sensitive, and rare species. The commenter recommends identifying distributed generation sites nearer to load centers to maximize efficiency across the state.

Section 2.17.4 (page 2-71) describes distributed generation as an alternative identified but eliminated from detailed analysis. The alternative was eliminated because distributed generation would not provide enough generation to meet California's RPS standard at the current rate of installation. The Draft EIS also states that "current research indicates that development of both distributed generation and utility-scale solar power will be needed to meet future energy needs in the United States." Additionally, the Energy Policy Act of 2005 established a goal for the Secretary of the Interior to approve 10,000 MW of non-hydropower renewable energy projects located on public lands by 2015; this level of renewable energy generation cannot be achieved on that timetable through distributed generation systems. BLM's purpose in considering this project is an effort to contribute to statewide renewable energy goals rather than only site-specific criteria.

B008-6 The commenter states that a master comprehensive plan that analyzes the spectrum of Colorado Desert resources, potential energy sources and technologies, energy load demands and grid integration, and energy output size should exist prior to siting of solar plants in wildlands; currently there is no such plan at any jurisdictional level, resulting in construction of large-scale energy projects distant from load centers without full consideration of impacts. The commenter recommends incentivizing distributed generation in load centers to avoid environmental impacts and the construction of additional gas baseload and peaker plants. The commenter states that further impacts could be avoided through full consideration of viable alternatives.

Consideration of development of new management plans is outside the scope of this document. However, the Final EIS does incorporate and consider all existing planning documents throughout its text. Regarding distributed generation, see response to Comment B008-5. Additionally, consideration of broad-scale incentives for certain technologies is beyond the scope of this document. The Final EIS considers a reasonable range of alternatives designed to avoid or minimize impacts, such as those mentioned by the commenter, throughout Chapter 4.

B009-3 The commenter clarifies the statutory requirements of NEPA to consider a range of alternatives, and the commenter appreciates inclusion of two reduced acreage alternatives; however, the commenter questions the mutual exclusivity of Alternatives 5 and 6.

While the Final EIS provides a range of developed alternatives, the decision-maker may choose elements of each alternative to approve. Alternative 5 and 6 are considered separately in the document, but elements of each alternative could be approved by the decision-maker.

B009-7 The commenter notes that some solar developers have signed Power Purchase Agreements, which influences BLM not to consider meaningful alternatives. The commenter recommends that the EIS include alternatives which minimize actual resource conflicts.

The Applicant has not signed a Power Purchase Agreement (PPA), and a PPA is consequently not considered by the BLM in the Final EIS. BLM abides by the requirements of NEPA in developing EIS documents. A central element of these documents is the provision of a reasonable range of alternatives and mitigation measures, which are developed to ensure thorough analysis and the minimization of environmental impacts to the greatest extent possible. The existence of PPAs is not considered or influential in the development of alternatives and mitigation measures. In the DHSP Final EIS, a range of alternatives and mitigation measures have been designed to minimize resource conflicts. A number of the alternatives suggested by the commenter (e.g., a private or degraded land alternative) are considered in the EIS in Section 2.17, but ultimately were eliminated from consideration due to technological, economic, or logistical infeasibility to meet the BLM's purpose and need for the project.

B009-8 The commenter states that identification, consideration, and analysis of alternatives by the BLM are arbitrarily limited to reflect the needs of the Applicant and pre-existing PPAs. The commenter states that BLM's assumption that a private land alternative would be infeasible due to the difficulty in aggregating parcels is questionable, as it has been accomplished by nearby solar projects.

Regarding PPAs and alternatives analysis, see response to Comment B009-7. Regarding private land, BLM identified three potential sites, as described in Section 2.17.2: Private Land within the Chuckwalla Valley. The sites identified consisted of semi-contiguous, small parcels owned by numerous landowners. Though other projects may have successfully aggregated private lands, this acquisition is project specific; parcel sizes, costs, willingness to sell, and contiguity may all vary widely from project to project. The sites identified by the BLM were determined to be technologically and economically infeasible to support the proposed utility-scale solar project. Additionally, as stated in Section 2.17.2, a private land alternative would not respond to the BLM's "purpose of and need for the proposed project, namely, to consider an application for the authorized use of public lands for a solar facility, which could include requesting modifications to the proposal that are within BLM's jurisdiction." Further information about the importance of BLM's purpose and need to the selection of alternatives is provided in the introduction to Section 2.17 in the Final EIS.

B009-14 The commenter states a preference for Alternative B, which would maximize opportunities for co-locating gen-tie facilities with the DSSF and would minimize duplication of facilities.

The decision-maker will consider the comment in making a final decision.

B011-3 The commenter states that the EIS fails to evaluate a reasonable range of alternatives, citing the Code of Federal Regulations to argue that a distributed generation alternative should not be rejected solely because it is outside of the agency's jurisdiction. The commenter further notes that 10,000 MW of distributed electricity could be achieved by 2015, meeting the purpose and need of the Energy Policy Act (EPAct).

The EIS cites substantial limits on immediate penetration of distributed resources into the grid, high costs, lack of electricity storage in most systems, and continued dependency of buildings on grid-supplied power (page 2-72) as viable reasons why a BLM-supported program of distributed generation could not achieve 10,000 MW by 2015. BLM supports the California Energy Commission and California Public Utilities Commission in their efforts to ensure that these substantial barriers to immediate development of distributed generation resources are removed in the near future. The EIS appropriately eliminated the Distributed and Rooftop Photovoltaics Alternative for detailed consideration.

B011-4 The commenter states that conservation and demand-side management is a viable alternative, even if it is outside the BLM's jurisdiction.

The conservation and demand-side management alternative was not rejected solely because it is outside of BLM's jurisdiction. It would also be too great a departure from the application to be considered a modification of the Applicant's proposal, and so is ineffective under NEPA.

B011-5 The commenter states that the rationale for rejecting other federal, state, or private land as alternative sites for the proposed project is not supported with evidence.

To the contrary, the EIS cites the number of parcels and the number of landowners that would require involvement to make a private land alternative possible along the Devers–Palo Verde (DPV) corridor (page 2-69). Aggregating hundreds of parcels owned by hundreds of unique landowners is a multi-year process, and is often unsuccessful. In addition, a private land alternative does not respond to BLM's purpose and need for this project. Alternative BLM land has numerous other applicants in queue for ROWs, as described on page 2-70. Additionally, should BLM-administered land along the I-10 corridor be available, it could require a different interconnection point to the California grid from the proposed project, and therefore an alternative location would require a new interconnection application, which would re-start the California Independent System Operator (CAISO) interconnection process; delaying the project for several years. These factors mean that an alternative location on BLM-administered lands would not be economically feasible. No changes to the alternatives considered in the EIS are warranted.

B011-6 The commenter states that the project proposes to use solar thermal technology.

This statement is incorrect. The project proposes to use photovoltaic technology.

D002-1 The commenter provides an introduction and states support for Alternatives 1 or 3.

The decision-maker will consider all comments in making a final decision on the project and issuing a decision.

E005-1 The commenter cites a previously published letter, written by the commenter, in the Desert Sun regarding solar panels on rooftops. The commenter states that rooftop solar would provide the benefits of solar energy while preserving the environment of the desert and the Chuckwalla Valley

Section 2.17.4 (page 2-71) describes rooftop solar as an alternative identified but eliminated from detailed analysis. The alternative was eliminated because rooftop solar would not provide enough generation to meet California's RPS standard at the current rate of installation. The Draft EIS also states that "current research indicates that development of both distributed generation and utility-scale solar power will be needed to meet future energy needs in the United States." The Draft EIS concludes that "alternatives involving distributed generation were eliminated from detailed analysis because it does not respond to the BLM's purpose and need for the Proposed Action, which is to respond to the Applicant's application for a ROW grant to construct, operate, and decommission a solar photovoltaic facility on public lands in compliance with FLPMA, BLM ROW regulations, and other federal applicable laws. Additionally, the Energy Policy Act of 2005 established a goal for the Secretary of the Interior to approve 10,000 MW of non-hydropower renewable energy projects located on public lands by 2015; this level of renewable energy generation cannot be achieved on that timetable through distributed generation systems."

F001-10 The commenter states that while Chapter 2 of the Draft EIS describes the proposed project as using "either high-profile or low-profile trackers"(page 2-6), the Applicant proposes to develop both parcels of the proposed project only with high-profile trackers in the configuration of Alternative 4. The commenter states that this proposal is more efficient, better meets BLM goals, and is essentially similar to Alternative 4 as analyzed in the Draft EIS with regard to geography and resource conditions.

The BLM analyzed Alternative 4 as the project that was proposed in the Applicant's Plan of Development, which included low-profile panels. It is noted that the decision-maker could choose any of the alternatives, including an alternative with attributes of two different alternatives, such as the Alternative 4 development footprint with the Alternative 7 panels as suggested by the commenter.

F001-11 The commenter states that using high-profile trackers in the footprint of Alternative 4 is within the range of alternatives evaluated in the Draft EIS, and that environmental impacts of this action would not change.

BLM agrees with the commenter's statement. Please see response to Comment F001-10.

F001-12 The commenter states that using high-profile trackers in the footprint of Alternative 4 is valid in light of the lack of new information or circumstances regarding the project since publication of the Draft EIS in April 2012.

BLM agrees with the commenter's statement. Please see response to Comment F001-10.

F001-13 The commenter states that using high-profile trackers in the footprint of Alternative 4 would not change direct, indirect, and cumulative effects evaluated in the

Draft EIS because the project footprint would not increase beyond what is analyzed in Alternative 4 and the conclusion that all alternatives would have unavoidable adverse visual impacts would not change.

BLM agrees with the commenter's statement. Please see response to Comment F001-10.

F001-14 The commenter states that using high-profile trackers in the footprint of Alternative 4 would not change the adequacy of the public involvement and interagency review associated with the Draft EIS, as previous comments on Alternatives 4, 6, and 7 will meaningfully inform the BLM of the public's attitude toward a high-profile version of Alternative 4. The commenter states that additional public comments will be available after publication of the Final EIS and addressed in the Record of Decision.

BLM agrees with the commenter's statement. Please see response to Comment F001-10.

F001-25 The commenter states that the assertion on page 2-65, Section 2.15, that Alternative 7 would have a nominal capacity of 150 MW is incorrect; the nominal capacity would be 125-135 MW. The commenter states that, as noted in the Applicant's 7 May 2012 submission to BLM, a fifteen-foot racking system has a higher efficiency rating and produces more energy per acre than a six-foot racking system, and the financial viability of the project will depend on the use of the more efficient fifteen-foot system. The commenter notes that if Alternative 4 used the fifteen-foot system, its maximum annual MWh would exceed any other alternative, and would therefore be the best alternative to help BLM meet its national energy policy goals.

The requested changes have been made to the Final EIS. The decision-maker will consider all comments in making a final decision.

F001-26 The commenter requests that page 2-68, "Private Land within Chuckwalla Valley" state that a private lands alternative would have substantially similar effects to a public lands project.

The requested change has not been made to the document. The Final EIS provides sufficient rationale for the exclusion of a private lands alternative. Without further analysis, the commenter's conclusion that "a private lands alternative would have substantially similar effects to a public lands project" cannot be asserted. Furthermore, many effects are highly site-specific, and a general conclusion of this nature cannot be validated.

F001-27 The commenter states that page 2-70, "Alternative BLM-Administered Land," should add that the use of alternative BLM-administered land would have substantially similar effects, or possibly greater effects, than the proposed land due to the decreased potential for shared ancillary facilities.

The requested change has not been made to the document. The Final EIS provides sufficient rationale for the exclusion of alternative BLM lands. Without further analysis, the commenter's conclusion that “use of alternative BLM-administered land would have substantially similar effects, or possibly greater effects, than the proposed land due to the decreased potential for shared ancillary facilities” cannot be asserted. Furthermore, many effects are highly site-specific, and a general conclusion of this nature cannot be validated.

F001-28 The commenter states that page 2-72 be revised to show that the project site is economically infeasible for wind development, as shown in BLM's 2005 Programmatic EIS on Wind Energy Development and other wind assessments in the area.

The requested changes have been made in the Final EIS.

BIOLOGICAL RESOURCES – GENERAL

A008-7 The commenter notes that the Draft EIS contains an incomplete definition of “take” from Section 3 of the federal Endangered Species Act on page 3.3-1.

The Final EIS has been revised to include the full definition of take under the description of Endangered Species Act (ESA) Section 9 in Section 3.3 (Biological Resources – Vegetation).

A008-14 The commenter requests clarification of how often the Designated Biologist (specified in Mitigation Measure MM Veg-1 on page 4.3-13 of the Draft EIS) would conduct on-site inspections. The commenter suggests that Designated Biologist should be on-site more frequently than once per month for compliance inspections.

Mitigation Measure MM Veg-1 in the Draft EIS specifies that in general the Biological Monitor's responsibilities will include (but not be limited to) those listed on page 4.3-13. This measure has been updated to state that “Biological Monitor will conduct inspections daily or weekly as necessary during construction and decommissioning in order to provide these weekly updates.”

A008-21 The commenter notes that the final project compensation requirements should reflect final design and (not or) the final alternative selected as is implied by the text in the main paragraph of Mitigation Measure MM Veg-6 on page 4.3-21 of the Draft EIS.

Mitigation Measure MM Veg-6 has been revised to reflect that final compensation requirements will reflect “final alternative selected, final design, and as-built project footprint.”

A008-22 The commenter states that the Final EIS should clarify whether the Renewable Energy Action Team process would be used for reviewing and approving project mitigation. The commenter states that items 4 and 5 in Mitigation Measure MM Veg-6 (“Review and Approval of Compensation Lands Prior to Acquisition” and “Management Plan”) should specify that mitigation lands and the associated management plan should be explicitly approved by the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG), not only by BLM and Riverside County in consultation with USFWS and CDFG.

Mitigation Measure MM Veg-6 (item 4) in the Final EIS has been revised to reflect that USFWS and CDFG (in addition to BLM and Riverside County) must review and approve compensation lands prior to acquisition. USFWS and CDFG will also need to approve the management plan for these lands.

A008-23 The commenter states that the Property Analysis Record for compensation lands (subitem d in item 4 of Mitigation Measure MM Veg-6) should be explicitly approved by the USFWS and CDFG, not only by BLM and Riverside County in consultation with USFWS and CDFG.

The discussion of the Property Analysis Record for compensation lands in subitem d, item 4 of Mitigation Measure MM Veg-6 has been revised to state that USFWS and CDFG approval would be required.

A008-33 The commenter states that measures intended to reduce standing water are not limited to reducing water used for dust control. The commenter further states that measures to reduce standing water (per Mitigation Measure MM Wil-1 [item 12] on page 4.4-26 of the Draft EIS) should be implemented by or in coordination with the BLM.

In the Final EIS Mitigation Measure MM Wil-1 (item 12) has been revised to clarify that "Appropriate actions to minimize standing water shall be implemented by BLM or by the Biological Monitor in coordination with BLM."

A010-21 EPA states that in light of the numerous renewable energy projects in the vicinity, the availability of compensation land may serve as a limiting factor for development. EPA recommends that the Final EIS identify compensatory mitigation lands for the DHSP and other reasonably foreseeable projects in the Riverside East Solar Energy Zone (SEZ), demonstrate that adequate compensation lands are available, clarify the rationale for 1:1 mitigation ratio for desert tortoise habitat in the context of higher ratios used in other projects, specify a timetable for compensatory mitigation, and discuss mechanisms to ensure protection of compensation lands and non-developed project ROW in perpetuity.

As described in Section 4.4.7 of the EIS, the Applicant is currently working with Wildlands Inc. to develop a suitable compensation strategy addressing the resources and ratios described in MM VEG 6 (see Appendix C of the Draft EIS). Specific compensation land availability cannot be identified or quantified at this time. Wildlands Inc. provided a review of private land availability in the area during a meeting with resource agencies on March 2, 2012, indicating that acquisition of the requisite acreage of suitable compensation lands to mitigate desert tortoise habitat loss is feasible. The 1:1 compensation ratio for desert tortoise is a minimum; the entire project site and gen-tie are considered occupied tortoise habitat. As detailed in Mitigation Measure VEG-6, compensation ratios depend on vegetation community as well as designation as a special management area, and range from 1:1 to 5:1. The 1:1 compensation ratio applies to impacts to Creosote Bush Scrub (Sonoran Desert Scrub), excluding state-jurisdictional streambeds mapped within Creosote Bush Scrub habitat (includes acreage within Palen-Ford Wildlife Habitat Management Area (WHMA); excludes Desert Wildlife Management Area [DWMA] and Critical Habitat Unit [CHU]). This compensation ratio is consistent with the Northern and Eastern Colorado Desert Coordinated Management Plan (NECO). A timetable for compensatory mitigation is stated in Mitigation Measure VEG-6: The entire Habitat Compensation Plan must be approved by the BLM, Riverside County, USFWS, and CDFG prior to the commencement of construction. No fewer than 30 days prior to ground disturbance, the project Owner will provide financial assurances to the BLM and Riverside County to guarantee that an adequate level of funding is available to implement the mitigation measures required by this condition that are not completed prior to the start of ground-disturbing project activities. Mechanisms to protect compensation lands are described in Mitigation Measure VEG-6, item 6 (e).

A012-8 The commenter states that BLM should include verbal or written weekly updates to CDFG and USFWS as one of the Designated Biologist's responsibilities. The commenter states that BLM should develop a work schedule indicating when the Designated Biologist is required to be on site, including a discussion of how weekly updates will be prepared without a corresponding on-site inspection.

Please see response to Comment A008-14. In addition, Mitigation Measure VEG-1 has been revised to clearly state that CDFG and USFWS will also receive the Designated Biologist's weekly updates during the construction and decommissioning phases of the project.

B006-23 The commenter states that the construction of the proposed project increases emissions of PM10 because of the potential disruption and elimination of thousands of acres of cryptobiotic soil crusts that are an essential ecological component in arid lands. The commenter states that the Draft EIS does not describe the on-site cryptobiotic soil crusts and would cause an unidentified portion of these crusts to lose their capacity to stabilize soils and trap moisture. The commenter states that the Draft EIS fails to provide a map of the soil crusts over the project site, and to present any avoidance or minimization measures; a revised or supplemental EIS must identify the extent of the cryptobiotic soils on site and analyze the potential impacts. The commenter states that quantitative and impact analysis related to desert pavement is also not analyzed/

The analysis of loss of vegetation and habitat presented in Sections 4.3 (Biological Resources – Vegetation) and 4.4 (Biological Resources – Wildlife) assume total loss of all acreage within the solar field site because, even though some vegetation would remain between solar arrays, this vegetation would be altered, and the site would be subject to impacts such as those described by the commenter (loss of cryptobiotic soil crusts). Therefore, the function of the habitat on site will be so severely degraded that the entire site is considered permanently disturbed. Therefore, mitigation in the form of habitat compensation is required (see Mitigation Measure VEG-6). Because of the assumption of permanent impacts to the entire solar field, the level of detail requested by the commenter is not required.

B006-25 The commenter states that while the Draft EIS references numerous plans that are key to minimizing and mitigating impacts to environmental resources, Appendix

C provides only three draft plans. The commenter provides additional plans that should be included in the Appendix for public and decision-maker review.

The Final EIS includes numerous draft plans, including Draft Desert Tortoise Translocation Plan (Appendix C8), Integrated Weed Management Plan (Appendix C10), Raven Management Plan (Appendix C14), Worker Environmental Awareness Plan (Appendix C15), Vegetation Management Plan (Appendix C17), and Closure and Reclamation Plan (Appendix C18). The habitat compensation plan is in active review and must be completed prior to a notice to proceed, if the project is authorized.

B008-11 The commenter describes cryptogamic covers and their potential to sequester CO2, and provides a results of a study that cryptogamic cover provide approximately 7% of global terrestrial net primary productivity and half of total terrestrial biological nitrogen fixation. The study further describes Biological Soil Crust (BSC).

The commenter expresses concern that removal of desert cryptogamic covers will result in loss of carbon sequestering potential. The carbon sequestration capacity of desert soils in the vicinity of the project are discussed in Section 3.5.2, Ecosystem Carbon Storage, in regard to greenhouse gas emissions and climate change. As discussed therein, current estimates of desert soil carbon sequestration potential are controversial, and it is likely that soil carbon storage at the project site is low. For additional discussion, please refer to Section 3.5.2, Ecosystem Carbon Storage.

BIOLOGICAL RESOURCES – VEGETATION

A004-24 The NPS would like to review the integrated weed management plan prior to implementation.

As requested by the commenter, the NPS has been added as a reviewer to the Integrated Weed Management Plan required in MM VEG-9.

A004-39 NPS requests to review the habitat compensation, integrated weed management plan, and other plans identified in Applicant Measures.

As requested by the commenter, the NPS has been added as a reviewer to the habitat compensation, integrated weed management plan, and other plans identified in the mitigation measures proposed in the EIS. Applicant Measures have been adopted where applicable and have not been revised in the Final EIS.

A008-18 The commenter requests that Mitigation Measure MM Veg-5 (item 5) on page 4.3-18 of the Draft EIS be revised to clarify that monitoring of reclamation, revegetation, or restoration sites should continue for 3 years or until the defined success criteria are achieved, whichever is later.

The requested revision has been made to Mitigation Measure MM Veg-5 (item 5) in the Final EIS.

A008-26 The commenter requests that the Eagle Mountain Pumped Storage project be included in the discussion of cumulative effects on vegetation (Draft EIS at page 4.3-60).

Please see response to Comment A008-25.

A010-5 EPA recommends early analysis of key resource areas be completed as early as possible, and states that such analyses were not included in the Draft EIS. The commenter states that while not federally jurisdictional, on-site drainages are important features of the desert ecosystem and recommends avoidance of drainages and desert dry wash woodlands be maximized through project redesign. The commenter suggests that vegetation may be able to be maintained under the high profile tracking system (Alternative 7) compared with the lower profile system (Alternatives 4 through 6), which would minimize disruption of the site's hydrology.

The Draft EIS (Section 2.17.10, pages 2-77 and 2-88) considered a higher mounted panels alternative, as requested by the commenter. While mitigation to protect, maintain, and restore native vegetation is described in Section 4.3 of the Draft EIS, no alternative photovoltaic (PV) technology, mounting system, or mounting height was identified by the EIS preparers that could achieve permanence of appreciable amounts of native vegetation on the solar project site. Even with PV panels mounted at a height to eliminate vegetation clearing, they would impact the desert environment due to shading — nearly 100 percent of the solar facility site would be shaded for a large portion of the day.

A010-10 EPA describes the many functions of and potential impacts to natural washes, including Blue Palo Verde-Ironwood Woodland, and recommends that BLM do the following in the Final EIS: demonstrate that downstream flows would not be adversely impacted due to proposed changes to natural washes and on-site disc-and-roll grading and include the finalized drainage plan to facilitate analysis. To avoid and minimize impacts to desert washes, EPA recommends that BLM adopt Alternative 6 or 7 and take other opportunities to reduce the project footprint, distribute PV panels and other project elements (including road crossings) to avoid or minimize use of desert dry wash woodlands and ephemeral washes, utilize existing natural drainage features on site, and maintain natural washes and include adequate flood control buffers.

As described in Section 4.20.6 of the Draft EIS (page 4.20-25) project effects on downstream flows would be minimized through mitigation measure MM WAT-4. In addition, because the main portion of the ephemeral wash that passes through the solar field area is located within a non-development area as shown on Figure 3.20-1, downstream flows would not be substantially affected by project development. The decision-maker will consider all preferences for alternatives in issuing a final decision on the project.

A012-11 The commenter states that BLM should require that in the monitoring plan for reclamation, re-vegetation, or restoration of the site, these activities should continue until the defined success criteria are achieved.

Please see response to Comment A008-18.

A012-19 The commenter states that BLM should require that the vegetation restoration plan include a discussion on seed collection and preservation.

Seed collection and storage measures for special-status plant species are a required component of the Vegetation Resources Management Plan required by Mitigation Measure VEG-7 (Mitigate Direct Impacts to Special-Status Plants). Seed of non-special-status species included in the seed mix(es) for general revegetation required by Mitigation Measure VEG-5 (Prepare and Implement a Vegetation Resources Management Plan) may be obtained from local commercial sources, and therefore the collection and storage methods may vary. Seed collection and handling is addressed in the project's Draft Vegetation Resources Management Plan in Appendix C-17 of this Final EIS.

B006-27 The commenter states that the Draft EIS chiefly relies upon off-site compensation for impacts to vegetation but also allows for nesting of mitigation without calling out that the vegetation resources must be present on the compensation lands in order for it to count. The commenter states that the Draft EIS fails to analyze the impacts of the project on microphyll woodlands and does not clarify where NECO Plan microphyll woodlands occur on the project or cumulative sites. The commenter states that the Draft EIS should protect new-to-science discoveries of crucifixion thorn through designation of an Area of Critical Environmental Concern (ACEC). The commenter states that the Draft EIS fails to adequately evaluate the rare plants on the project site due to reliance on a single year survey. The commenter states that all of the above incomplete data sets preclude evaluation and avoidance/minimization of impacts and require a supplemental Draft EIS.

Please see Mitigation Measure VEG-6 for a clear discussion of the compensation strategy for the proposed project. As described therein, compensation lands acquired to provide mitigation for impacts to vegetation communities must support the same vegetation communities present on the affected lands in the required ratios (1:1, 3:1, or 5:1, depending on vegetation community and impacts within wildlife habitat management areas). As described in item 1 of that measure, nesting refers to habitat compensation requirements for species. There, a compensation land parcel that supports creosote bush scrub would satisfy requirements for mitigation of creosote bush scrub, but may also satisfy requirements for impacted species that occur in creosote bush scrub if addition species-specific requirements are also met. It would not "count" for any other vegetation community, however. No changes have been made to the Final EIS. As described in Sections 3.3 and 4.3 of the EIS, microphyll woodlands on site were classified specifically as Blue Palo Verde-Ironwood Woodland, which corresponds to Desert Dry Wash Woodland as mapped in the NECO Plan. Impacts to microphyll woodlands from the proposed project are addressed in Section 4.3.7 and 4.3.12. Cumulative impacts to microphyll woodlands are addressed in Section 4.3.16. Regarding the comment that the EIS should identify an alternative that provides protection for crucifixion thorn occurrences through designation of an ACEC, both Alternatives 6 and 7 would avoid these occurrences; however, the designation of lands as an ACEC is beyond the scope of this project-specific EIS. Regarding the comment that the Draft EIS fails to adequately evaluate rare plants, surveys were conducted and the potential for several annuals that could occur, but were not detected, is disclosed and analyzed. Mitigation Measure VEG-7 (Mitigate Direct Impacts to Special-Status Plants) provides a comprehensive strategy to mitigate impacts to known populations of rare plants as well as any additional occurrences that could be discovered during the required pre-construction surveys. No changes have been made to the Final EIS.

B009-5 The commenter notes that Alternatives 6 and 7 would avoid impacts to portions of Big Wash and desert dry wash vegetation, and notes that avoidance is the most appropriate form of mitigation for impacts to this plant community.

The decision-maker will consider all comments in making a final decision on the project and issuing a decision.

B009-9 The commenter states there is a discrepancy in the mapped location of Microphyll Woodland, also referred to as Dry Desert Wash Woodland in the NECO Plan, in the Draft EIS and in the NECO Plan. The commenter requests resolution to this discrepancy through further study and analysis of Microphyll Woodland impacted by the DHSP, with results included in the Final EIS, especially given the Biological Resources Technical Report (BRTR) states that Dry Desert Wash Woodlands occur throughout the project area primarily in dry washes. The commenter states that the full extent of this community needs to be accounted for and addressed in the habitat compensation plan.

Blue Palo-Verde Ironwood Woodland, mapped in the Final EIS in figure 3.3-1a, is a subset of Desert Dry Wash Woodland as described in the NECO Plan. In the Final EIS, Section 3.3.5: Vegetation Communities states that "Blue Palo Verde–Ironwood Woodland is a subset of Holland's description of 'Desert Dry Wash Woodland;'" Desert Dry Wash Woodland is covered broadly in the NECO plan, and Blue Palo Verde-Ironwood Woodland is described in detail in the Final EIS as a special status plant community in Section 3.3.5: Blue Palo Verde–Ironwood Woodland (Desert Dry Wash Woodland). Section 4.3 describes a 3:1 ratio for compensatory land for impacts to Blue Palo Verde–Ironwood Woodland. Thus this vegetation community is fully considered in the Final EIS.

Additionally, project-specific mapping of vegetation communities was conducted for the Final EIS, providing a much more fine-grained delineation of vegetation types in the area than that provided in the NECO Plan, which relied more heavily on aerial photos and older data and used a much larger minimum mapping unit (see NECO Plan Appendix H: Natural Communities regarding methodology). Discrepancies between the NECO Plan map and the DHSP map thus represent completion of the substance of the commenter's request, in that the Final EIS has further researched microphyll woodlands by identifying more specific community types, implementing project-specific methodologies, and utilizing updated data sources and surveys. Discrepancies between the two documents do not represent oversight of important vegetation communities by the Final EIS. The impacted areas of vegetation communities are fully considered in Section 4.3 of the Final EIS, and compensatory mitigation is required by MM VEG-6.

B009-10 The commenter states that Dry Desert Wash Woodland may be underestimated in the Final EIS, and points out that the proposed gen-tie line would impact an additional 51 acres of the vegetation community. The commenter states that MM VEG-1 through VEG-5 are more appropriately characterized as project management, not mitigation, and that MM VEG-6 alone represents a mitigation measure by requiring preparation and implementation of a habitat compensation plan; the commenter requests inclusion of this plan in the document. The commenter states that compensatory habitat will still result in a net loss, and states concern over the availability of suitable compensatory lands, which should be specifically identified, along with enhancement measures and a time frame, by the compensation plan.

Regarding the estimation of Dry Desert Wash Woodland impacts, see response to Comment B009-9. The Final EIS notes the 51 acres of impacted Blue Palo Verde-Ironwood Woodland in Table 4.3-2, as well as in Section 4.3.12: Direct of Effects of Construction of Alternative B.

While MM VEG-1 through VEG-5 help direct project management, they also mitigate potential impacts to biological resources; their requirements are thus itemized as mitigation measures.

Regarding the project Habitat Compensation Plan and availability of compensation lands, please see response to Comment A010-21.

Regarding the net loss of habitat in spite of compensatory mitigation lands, Section 4.3.7: Residual Impacts and Unavoidable Adverse Effects acknowledges this impact, stating "Even with off-site compensation at recommended ratios, there would be a net loss of the native vegetation and related resources (including habitat and streambed values) of 1,208 acres."

Additionally, for CEQA, The threshold of significance used in this document for loss of habitat is not a "no net loss" standard, and "fully offsetting the loss of natural communities" is not possible, as described above. CEQA significance criteria are outlined in Section 4.3.17. The EIS states that the project would have a significant effect if it would "Have a substantial adverse effect, either directly or through habitat modifications, on any plant species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFG or USFWS" or if it would "Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFG or USFWS."

D002-8 The commenter requests that figures be included in the Final EIS that show areas of offsite desert dry wash woodland that could be affected by alterations in water quality or surface hydrology from project construction and operation.

The requested data are not available for mapping or quantification, as obtaining full survey data of the entire Chuckwalla Valley would be beyond the scope of this project's EIS; however, the Draft EIS includes a mitigation measure (MM VEG-10, page 4.3-35) that would require a desert dry wash woodland monitoring and reporting plan, which is an adaptive management plan to monitor off-site effects of water table drawdown on vegetation, and to minimize and compensate for losses that do occur.

D002-9 The commenter notes that the Draft EIS states that cumulative projects would impact over 35,000 acres of desert dry wash woodland in extremely rare habitat, and recommends compensatory habitat mitigation.

The Draft EIS includes a mitigation measure (MM VEG-6) to compensate for loss of desert dry wash woodland at a ratio of 3:1 (see Section 4.3, page 4.3-22). Loss of this vegetation type as a result of other projects in the cumulative scenario would be mitigated through each individual decision process.

F001-2 The commenter states that in Table ES-1, Significance Criterion VEG-1 understates the mitigation value of off-site compensation by failing to note that it offsets a net loss of habitat by permanently preserving otherwise unprotected habitat. The Applicant references Comment F1-90 for further information.

Significance Criteria VEG-1 does consider the value of off-site habitat compensation to reduce the adverse effects of the Proposed Action. However, the functional loss of this habitat remains and while mitigated for the purposes of CEQA, this habitat loss contributes to the loss of habitat in the region. No changes to the document have been with regard to this comment.

F001-23 The commenter states that the proposed project's site plan avoids almost all effects to Emory's crucifixion thorn by virtue of most of the plants being located within a setback from the Southern California Edison (SCE) 161kV line transecting the southern parcel, and minor adjustments to the site plan with a setback of 100 feet could avoid all remaining plants. The Applicant recommends that Table 2-11 and Section 4.3 of the Draft EIS be revised to indicate that the proposed project design will for the most part avoid all identified Emory's crucifixion thorn, with implementation of Mitigation Measure MM VEG-7 requiring mitigation for any project impacts to Emory's crucifixion thorn that could not be avoided.

The requested changes have been made in the Final EIS.

F001-30 The commenter recommends that BLM update language on page 3.3-8, Section 3.3.3, to indicate that vegetation mapping and jurisdictional delineation of gen-tie Alternative E has been completed in the spring of 2012.

The requested changes have been made in the Final EIS.

F001-31 The commenter recommends that BLM update language on page 3.3-9, Section 3.3.3, to indicate that botanical surveys of gen-tie Alternative E have been completed in the spring of 2012.

The requested changes have been made in the Final EIS.

F001-32 The commenter recommends that BLM update language on page 3.3-12, Section 3.3.3, to indicate that spring surveys were completed in 2012, with details available in Appendix C.

The requested changes have been made in the Final EIS.

F001-33 The commenter recommends that BLM update language on page 3.3-14, Section 3.3.5, by omitting a reference to the association between Creosote Bush Scrub on Partially Stabilized Sand Fields with the Pinto Wash.

The requested changes have been made in the Final EIS.

F001-34 The commenter recommends that BLM update language on page 3.3-15, Section 3.3.5, by omitting a reference to the association between active sand dunes with the Pinto Wash/Coxcomb Mountains.

The requested changes have been made in the Final EIS.

F001-35 The commenter requests that BLM update special-status plant occurrences on gen-tie alignment alternative E in Table 3.3-2 according to the BRTR Supplement; the commenter requests that *Cryptantha costata* be added to the table.

The requested changes have been made in the Final EIS.

F001-36 The commenter requests that Section 3.3.7, Special Status Plant Species (page 3.3-21), be updated to state that "Speckled milk-vetch occurs on the Alternative E alignment (Appendix C. [BRTR Supplement])," and that "Coachella Valley milk-vetch is not expected to occur in the project area."

The requested changes have been made in the Final EIS.

F001-37 The commenter requests that Section 3.3.7, Special Status Plant Species (page 3.3-21), be updated to state that "On gen-tie alignment Alternative E, there is a high probability that chaparral sand verbena could be found in sandy areas, particularly dunes and partially stabilized aeolian sand, along the alignment. It also could occur, with lower probability, along road or wash margins on the alignment."

The requested changes have been made in the Final EIS.

F001-38 The commenter requests that Section 3.3.7, Special Status Plant Species (page 3.3-21), be updated to state that "Harwood's woolly-star was documented at multiple locations along portions of gen-tie alignment Alternative E crossing dunes and partially stabilized sand (see Figure 4 of Appendix C16 [BRTR Supplement]). Because it is an annual plant, Harwood's woolly-star plants could be found in future years in other locations within the dunes or partially stabilized sand portions of the alignment" instead of the current text on Harwood's woolly-star.

The requested changes have been made in the Final EIS.

F001-39 The commenter recommends that BLM revise page 3.3-22, Section 3.3.7 to state that Mesquite neststraw was not located during field surveys of gen-tie alignment Alternative E.

The requested changes have been made in the Final EIS.

F001-40 The commenter requests that Section 3.3.7, Special Status Plant Species (page 3.3-23), be updated to state that "Ribbed cryptantha (*Cryptantha costata*): Ribbed cryptantha is an annual species found on windblown and stabilized sands, in the eastern Mojave and Sonoran Deserts in California, eastward into Arizona and south into Baja California. It flowers in spring. It is ranked as California Rare Plant Rank (CRPR) 4.3 (limited distribution, "watch list"). It is not managed by BLM as a sensitive species (BLM 2010a). It occurs throughout the dune habitat along gen-tie alignment alternative E (see Figure 4 of Appendix C. [BRTR Supplement]). In addition to these dunes, small patches of marginal habitat are present throughout the project study area on roadsides, washes, and other sandy areas. However, it has not been located on the proposed solar facility site or on gen-tie alignment Alternatives B, C, or D. Because it is an annual plant, ribbed cryptantha plants could be found in future years in other locations within the dunes or partially stabilized sand portions of the alignment."

The requested changes have been made in the Final EIS.

F001-41 The commenter recommends that BLM revise page 3.3-24, Section 3.3.9 to state that stream channels in the Palen Dry Lake drainage basin area do not fall within the jurisdiction of the U.S. Army Corps of Engineers (USACE), and that Appendix C notes USACE's confirmation of this at the DHSP site.

The requested changes have been made in the Final EIS.

F001-76 The commenter recommends specific revisions to page 4.3-4, Section 4.3.7, to state that most construction impacts to vegetation resources would occur during Phases 2 and 3 (September 2013 through May 2015). The commenter recommends omitting the size designation (800 acres) of the site grading and preparation in area in the context of this change.

The requested changes have been made in the Final EIS.

F001-77 The commenter recommends specific revisions to page 4.3-7, to reflect USACE's 29 May 2012 Jurisdictional Determination that the DHSP site has no waters of the United States, and that the Colorado River Basin Regional Water Quality Control Board (Region 7) has indicated that 401 Water Quality Certification is not necessary.

The requested changes have been made in the Final EIS.

F001-78 The commenter recommends including the following text at the end of the first paragraph of MM VEG-1: "Minimum qualifications shall be as follows:"

The requested changes have been made in the Final EIS.

F001-80 The commenter requests that on page 4.3-21, MM VEG-6, BLM reconcile acreage discrepancies between the text and table.

The requested changes have been made in the Final EIS.

F001-81 The commenter recommends specific revisions to page 4.3-23, including the following addition regarding mitigation land: “If acquisition of sufficient acreage within the I-10 corridor is not feasible, then the Project Owner will coordinate with Resource Agencies to identify other suitable lands to compensate for the project’s impacts to desert tortoise habitat connectivity.”

The requested changes have been made in the Final EIS.

F001-84 The commenter states, in reference to the Draft EIS discussion of Emory's crucifixion thorn on page 4.3-30, that Alternatives 6 and 7 would easily avoid the plant, and the Applicant does not believe that the crucifixion thorn occurrences or the project’s anticipated impacts to these plants are sufficient grounds for either of these project area reductions. The commenter notes that the crucifixion thorn is not a sensitive, threatened, or endangered species and that it could be appropriately mitigated to less-than-significant levels, and that the impacts of Alternative 4 (the Applicant's preferred ROW configuration, but with the use of high-profile solar panels analyzed in Alternative 7) are overestimated in the Draft EIS. The Applicant states that if project design cannot effectively avoid 75 percent of the plants, then the Applicant is prepared to implement one or more of the other strategies recommended in the Draft EIS.

The BLM considers a variety of environmental factors in the development of project alternatives to support the NEPA process. For biological resources, the avoidance of these areas would not only reduce or avoid impacts to Emory's crucifixion thorn but would also minimize habitat loss in areas surrounding these occurrences. Emory's crucifixion thorn, while not State or federally listed, is considered a plant of limited distribution in California and was addressed in the NECO planning document. No changes to the document have been made with regard to this comment.

F001-85 The commenter states that Section 2.7 of the Draft EIS describing the 9-acre avoidance area for Alternative 6 does not provide the BLM's rationale for delineating the avoidance area shown on Figure 2-10; and that this alternative is effectively redundant with the provision of MM VEG-7, which requires a 250-foot avoidance buffer around Emory's crucifixion thorn. The commenter believes that a smaller buffer area of 100 feet may be suitable to protect this species through careful avoidance of edge effects through Applicant Measures and Mitigation Measures contained in the Draft EIS.

The 9-acre avoidance area was drawn to avoid a population of crucifixion thorn with enough of a buffer area to avoid edge effects to the plants. However, BLM concurs that edge effects can be minimized through careful implementation of mitigation measures in the EIS. The commenter's suggested revisions regarding reducing the 250-foot buffer to 100 feet have been adopted in the Final EIS.

F001-86 The commenter recommends revisions to Mitigation Measure MM VEG-7 on Draft EIS page 4.3-30 be modified to include Harwood's woollystar and other revisions.

The commenter's suggested revisions have been adopted in the Final EIS.

F001-88 The commenter recommends specific revisions to the second numbered paragraph of MM VEG-10 on page 4.3-35, including “other appropriate indicators of water stress” in addition to pre-dawn water potential.

The requested changes have been made in the Final EIS.

F001-89 The commenter recommends specific revisions to MM VEG-10 on page 4.3-36, acknowledging two rather than four groundwater dependent plant species.

The requested changes have been made in the Final EIS.

F001-90 The commenter recommends specific revisions to page 4.3-36, Alternative 4 Residual Impacts and Unavoidable Adverse Effects, to be consistent with text on pages 4.3-63 and 4.3-67 of the Draft EIS. The commenter suggests stating that “The net loss of native vegetation and related resources (including habitat and streambed values) would be reduced over time through habitat compensation, which is expected to prevent future losses of habitat by placing a permanent conservation easement and deed restrictions on private lands that could otherwise be converted for urban, agricultural, or energy development.”

The revision has not been adopted in the Final EIS because, even with compensation, development of the project would result in a net loss of habitat. .

F001-92 The commenter recommends specific revisions to page 4.3-45, Alternative B Residual Impacts and Unavoidable Adverse Effects, including the following text: “The net loss of the native vegetation and related resources (including habitat and streambed values) would be reduced over time through habitat compensation, which is expected to prevent future losses of habitat by placing a permanent conservation easement and deed restrictions on private lands that could otherwise be converted for urban, agricultural, or energy development.”

See response to comment F001-90.

F001-93 The commenter recommends specific revisions to page 4.3-47, Alternative C Residual Impacts and Unavoidable Adverse Effects, including the following text: “The net loss of the native vegetation and related resources (including habitat and streambed values) would be reduced over time through habitat compensation, which is expected to prevent future losses of habitat by placing a permanent conservation easement and deed restrictions on private lands that could otherwise be converted for urban, agricultural, or energy development.”

See response to comment F001-90.

F001-94 The commenter recommends specific revisions to page 4.3-51, Alternative D Residual Impacts and Unavoidable Adverse Effects, including the following text: “The net loss of the native vegetation and related resources (including habitat and streambed values) would be reduced over time through habitat compensation, which is expected to prevent future losses of habitat by placing a permanent conservation easement and deed restrictions on private lands that could otherwise be converted for urban, agricultural, or energy development."

See response to comment F001-90.

F001-95 The commenter requests that pages 4.3-51 through 4.3-52 be updated to reflect results of the Applicant's 2012 rare plant surveys for Alternative E, and provides specific revisions within the text.

The majority of the requested changes have been made in the Final EIS. The revision regarding Harwood's woollystar was rejected, as no rationale is provided for including only that one species in the mitigation requirements.

F001-96 The commenter recommends specific revisions to page 4.3-56, Alternative E Residual Impacts and Unavoidable Adverse Effects, including the following text: "The net loss of the native vegetation and related resources (including habitat and streambed values) would be reduced over time through habitat compensation, which is expected to prevent future losses of habitat by placing a permanent conservation easement and deed restrictions on private lands that could otherwise be converted for urban, agricultural, or energy development."

See response to comment F001-90.

F001-97 The commenter provides specific revisions to the size of existing and foreseeable project impacts on Sonoran Creosote Bush Scrub and Desert Dry Wash Woodland (172,551 and 44,300 acres respectively) as well as the percentage contribution to these impacts of the proposed project (0.4% and 0.9 to 1.2% respectively).

No rationale is provided by the commenter justifying why up to 0.4 percent loss of Sonoran Creosote Bush Scrub and up to 1.2 percent loss of Desert Dry Wash Woodland does not represent a substantial contribution to an adverse effect. Furthermore, under NEPA, a cumulative impact is appropriately analyzed as "...the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions" (40 CFR 1508.7). Therefore, the total cumulative effect on the environment of all cumulative actions is of concern in the NEPA analysis (i.e., 172,551 acres of Sonoran Creosote Bush Scrub [or 4.5 percent of this plant community] and 44,300 acres of Desert Dry Wash Woodland [or 6.5 percent of this plant community] in the NECO planning area), not merely whether the project's incremental effect represents a substantial contribution to that effect. CEQA, rather, is concerned with the magnitude of a project's contribution toward a cumulative effect in determining significance. Nonetheless, from a CEQA perspective, relying on the argument that 0.4 percent (or any percent) loss of a vegetation type is small, as compared to the whole, to justify the conclusion that the cumulative contribution is less than significant is known as the "ratio theory" and was explicitly rejected in *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692 [EIR improperly concluded a proposed cogeneration plant's air emissions were not a significant cumulative impact, based on a determination that the plant's emissions would be less than 1 percent of area emissions of the relevant pollutants] and *Los Angeles Unified School Dist. v. City of Los Angeles* (1997) 58 Cal.App.4th 1019. The Final EIS has been modified to include the cumulative total loss of these two plant communities and the percentage of the cumulative loss, but not to disclose the magnitude of the project's contribution to the cumulative effect, as this is does not contribute appropriately to the analysis under either NEPA or CEQA.

F001-99 The commenter recommends revisions to Draft EIS page 4.3-65 to include Harwood's woollystar and ribbed cryptantha.

The requested changes have been made in the Final EIS.

F001-199 The commenter states that Table 4.24-1, Off-site dust, refers to dust and erosion during construction and operation of the project, but the analysis in Section 4.3.7 of the Draft EIS refers to off-site dust during construction and decommissioning.

Section 4.3.7, Operation and Maintenance, refers to the potential for O&M dust to affect vegetation, special-status plants, and jurisdictional resources due to dust and other soil disturbances. Decommissioning has been included in Table 4.24-1: Off-site dust, but Operation and Maintenance has not been removed.

F001-200 The commenter states that Table 4.24-1, State jurisdictional streambeds, refers to unavoidable adverse offsite impacts to state jurisdictional streambeds, but the analysis in Section 4.3.7 states that impacts to state jurisdictional streambeds are only a potential impact.

Section 4.3.7 identifies both direct and indirect effects of construction, operation and maintenance, and decommissioning to state jurisdictional streambeds both on and off the project site. For example, the section states that "Altered surface flows may affect downstream vegetation by altering water or sediment availability," and MM VEG-8 is designed to "minimize adverse effects of construction activities to jurisdictional streambeds both on site and off site." No changes have been made to the document.

BIOLOGICAL RESOURCES – WILDLIFE

A004-40 The commenter requests that MM WIL-5 be modified to add the requirement that copies of trip reports and annual reports be forwarded to NPS as soon as available.

As requested by the commenter, the mitigation measure has been revised to require monthly reporting if data is collected.

A008-1 The commenter states that the project owner should consider burying the 34.5 kV collection system between the switchgear and the substation (described on page 2-8 of the Draft EIS) because this would minimize potential avian impacts without additional ground disturbance.

Pages 2-75 through 2-77 of the Draft EIS address the challenges of undergrounding transmission lines; undergrounding collector lines would pose the same challenges, especially with regard to ground disturbance and air quality and noise impacts from trenching equipment. Mitigation Measure MM Wil-1 (Wildlife

Impact Avoidance and Minimization) item 6 requires transmission lines and all electrical components to be designed, installed, and maintained in accordance with the Avian Power Line Interaction Committee's (APLIC) Suggested Practices for Avian Protection on Power Lines. No changes to the Draft EIS are warranted as a result of this comment.

A008-3 The commenter requests clarification of whether the meteorological station would be free-standing or would require guy wires (see page 2-8 of the Draft EIS). The commenter requests that if guy wires are used that they be outfitted with bird deterrence devices in accordance with the APLIC guidelines.

As stated on page 2-8 of the Draft EIS, the meteorological station(s) would be 6 feet in height and would be set on a stainless-steel tripod base (approximately 10 feet by 10 feet). A structure this size would not require guy wires for stability. Any wires associated with the meteorological station(s) would be for security purposes and would pose minimal, if any, risk to birds.

A008-4 The commenter states that a security fence (see page 2-9 of the Draft EIS) should be installed contiguous to the permanent desert tortoise exclusion fence to minimize the probability that animals will enter the site by jumping over the exclusion fence and burrowing under the security fence.

Mitigation Measure MM WIL-2 has been revised for the Final EIS to specify that "Security fencing would be installed as near as is feasible to permanent desert tortoise exclusion fencing in order to prevent animals from being trapped between the two fences."

A008-5 The commenter requests that if the O&M facility is off-site the project owner use a monopole structure to support necessary telecommunications equipment in order to deter bird nesting and use by ravens (see page 2-11 of the Draft EIS).

For the Final EIS, Mitigation MM WIL-6 has been revised to specify that "if the O&M facility is developed off-site, a monopole structure will be used to support telecommunications equipment in order to deter bird nesting and use by ravens."

A008-6 The commenter states that the western Chuckwalla Valley, including the proposed project site, is a critical linkage area between the Mojave and Colorado/Sonoran deserts for numerous species, particularly desert tortoise. The commenter also states that connectivity studies by BLM and CDFG support that the project vicinity, especially the area west of Kaiser Road, is important for desert tortoise connectivity. The commenter argues that the Cottonwood Pass is not as suitable for connectivity because of the road entrance to Joshua Tree National Park. The commenter notes that the project site and areas to the east of the project site contain suitable desert tortoise habitat. The commenter suggests aligning the eastern boundary of the proposed project with the DSSF boundary, which would leave a 0.5-mile corridor rather than a 0.2-mile-wide corridor (USFWS-proposed alternative). [page 2-68]

As described in Section 4.4.7 of the EIS, the proposed project site provides only marginal habitat for desert tortoises. The Final EIS has been revised to provide additional detail regarding habitat modeling for the project site (USGS Desert Tortoise Habitat Model, Nussear et al. 2009). The USFWS recommends a project alternative that would remove the two farthest east 40-acre parcels of BLM land from the project site and would create conservation easements in this area in order to preserve a wider corridor for tortoise movement. BLM disagrees that this would substantially increase wildlife movement, particularly desert tortoise movement, east of the project site. As noted in Section 2.17.1 (Alternative to Facilitate Wildlife Movement), this alternative was rejected because BLM considers the critical connectivity area for desert tortoise to be west of the project.

A008-8 The commenter requests that the Final EIS include additional detail on desert tortoise occurrences in the vicinity of the proposed project, in particular the area between Kaiser Road and Eagle Mountain Road (Draft EIS at page 3.4-18).

The Final EIS includes the results of protocol-level surveys for desert tortoise on the project site. Additional detail regarding occurrences in the project area is available in the technical report for the DSSF project. Figure 16 on page 38 of Appendix H of the DSSF Final EIS shows several tortoise occurrences between Kaiser Road and Eagle Mountain Road.

A008-9 The commenter requests clarification regarding seasonal foraging by golden eagles on the project site, including the types of eagles (floaters, juveniles, subadults, resident adults) using the site throughout the year (Draft EIS at page 3.4-22.

The Draft EIS acknowledges that the project site contains potential foraging habitat for golden eagles. Subsequent studies (per Mitigation Measure MM Wil-5) will supplement existing studies and further establish whether active nests are present within a 10-mile radius of the project site and gen-tie alignment. Mitigation Measure MM Veg-6 (Provide Off-Site Compensation for Impacts to Vegetation and Habitat) requires 1:1 compensatory habitat acquisition for impacts to golden eagle foraging habitat. BLM does not believe that more detailed analysis of year-round foraging by golden eagles than is required in MM WIL-5 is necessary in order minimize impacts on foraging habitat.

A008-10 The commenter requests citations or survey results to support the conclusion on page 3.4-22 of the Draft EIS that golden eagle foraging would likely be more common during winter and migration seasons.

The sentence referenced by the commenter has been removed from the Final EIS.

A008-11 The commenter requests the date of the unpublished observations of Gila woodpecker referenced on page 3.4-22 of the Draft EIS in order to help determine whether the birds were using the site for breeding, migration, or wintering habitat.

The discussion of Gila woodpecker in Section 3.4.5 (Special-Status Wildlife) in the Final EIS has been revised to include an updated citation for Gila woodpecker surveys. Surveys in 2012 were conducted in late March through May. The 2010 observation of a Gila woodpecker was in December (as noted in the text of the Draft EIS).

A008-16 The commenter requests revision of Mitigation Measure MM Veg-2 to reflect that it would likely not be possible to relocate all animals outside of the project site and still within 500 meters of their original locations. The commenter further notes that translocation of desert tortoises should be conducted according to USFWS's most recent guidance (Draft EIS at page 4.3-15).

Mitigation Measure MM Veg-2 has been revised in the Final EIS to reflect that animals will be relocated outside the project footprint in a suitable location that is "within 500 meters of the animal's original location, if feasible." The measure has also been updated to note that any translocation of desert tortoises will be done according to USFWS's most recent guidance.

A008-17 The commenter states that any person who handles desert tortoises must be approved (in advance) by USFWS as an Authorized Biologist, including the Designated Biologist and any Biological Monitors who might handle tortoises (Draft EIS at page 4.3-15).

Mitigation Measure MM Veg-2 has been revised for the Final EIS to reflect that "any biologists who handle tortoises will be authorized to do so in advance by USFWS."

A008-19 The commenter requests clarification regarding potential habitat compensation requirements for burrowing owls. The commenter notes that Mitigation Measure MM Veg-6 on page 4.3-21 does not specify whether compensation would be required for incidental observations or owls observed during clearance surveys. The commenter also notes that if owls are encountered during clearance surveys, a burrowing owl plan would need to be prepared and their removal would need to be conducted in accordance with CDFG requirements.

Mitigation Measure VEG-6 has been revised to clarify that owls detected during focused or clearance surveys, as well as observed incidentally, shall be subject to the compensation requirements identified in the measure. Mitigation Measure MM WIL-4 identifies surveys and compensation for burrowing owls and identifies protocol for implementing buffers around active nests, and the development and implementation of a Burrowing Owl Passive Relocation Plan for the proposed relocation of any owls (outside of the breeding season only).

A008-20 The commenter notes that a bullet in Mitigation Measure MM Veg-6 identifies a minimum compensation ratio of 1:1 for desert tortoise habitat and habitat linkages while subsequent text cites minimum acreages of occupied habitat. The commenter requests clarification of whether a minimum ratio or acreage is being used and whether suitable, but unoccupied, desert tortoise habitat could be used for compensation.

Mitigation Measure MM Veg-6 has been revised for the Final EIS to reflect that "Final compensatory habitat acreages will be based on the final alternative selected and final project design." Suitable but unoccupied desert tortoise habitat may be appropriate for compensatory mitigation if it meets the other standards in

Mitigation Measure MM Veg-6. BLM, USFWS, and CDFG would all need to approve mitigation lands.

A008-27 The commenter requests clarification regarding the statement on page 4.4-17 (end of the second paragraph) in the Draft EIS that "The project description does not propose to specify or designate wildlife corridors."

This statement has been removed from the Final EIS. The paragraph has been revised to state the following: "Project construction would further limit connectivity by eliminating movement opportunities across the site for most wildlife species, but the actual consequence to wildlife movement would be minor due to the land uses and movement barriers described above. Intermountain movements are more likely to occur in the less disturbed northern reaches of the Chuckwalla Valley. The limited wildlife connectivity value of the project site is also explained in Section 2.17, which assesses a proposal to specify or designate a wildlife movement route through the abovementioned small corridor to the east of the proposed solar facility site."

A008-28 The commenter states that the Draft EIS does not address impacts on desert tortoise connectivity form an increased volume of traffic on Kaiser Road, particularly during construction. The commenter disagrees with the conclusion on page 4.4-18 of the Draft EIS that the proposed project would not substantially affect desert tortoise connectivity. The commenter also states that it is necessary to know how much traffic would be generated by an off-site O&M facility and how many construction and water vehicles would use Kaiser Road in order to assess impacts on desert tortoise. The commenter recommends reducing traffic by using an on-site O&M facility.

As described in the Final EIS (Section 4.20.6 under the heading "Mitigation Measures"), an estimated 10 to 50 round truck trips per day during construction and 2 to 3 truck trips per day during operations would increase the potential for direct injury or mortality of wildlife by vehicles, particularly the federally and state-listed desert tortoise. Designated critical habitat for the desert tortoise occurs adjacent to the west side of Kaiser Road. However, the projected increase in truck trips during construction would not result in a substantial hourly increase in overall traffic (hourly increase of 1 to 6 round trips), and would therefore not constitute a substantial increase in effects to wildlife analyzed in Section 4.4 (Biological Resources – Wildlife). Similarly, an additional 2 to 3 truck trips per day during operations would not substantially increase traffic effects to wildlife (including desert tortoise).

A008-29 The commenter states that the wildlife displacement discussed in Section 4.4.7 on page 4.4-19 of the Draft EIS, when combined with increased traffic from the projects, would lead to increased vehicle collisions with wildlife. The commenter requests inclusion of traffic-related wildlife mortality in project impacts.

For the Final EIS, the paragraph addressing wildlife displacement in Section 4.4.7 has been revised to reflect the risk of wildlife mortality from vehicle collisions when animals are flushed from the project site.

A008-30 The commenter states that construction activities outside of desert tortoise exclusion fencing, including access roads, pulling and tensioning sites, and storage and parking areas, should be limited to disturbance areas flagged according to Mitigation Measure MM Wil-1, item 1 on page 4.4-23 of the Draft EIS.

This comment is noted. All areas subject to project-related disturbance would be covered by the requirements in Mitigation Measure MM Wil-1, item 1.

A008-31 The commenter requests explanation of why Mitigation Measure MM Wil-1 (item 10) requires vehicle parking and storage inside areas enclosed by desert tortoise exclusion fencing only "to the extent feasible."

According to the Applicant's proposal, only gen-tie line construction and maintenance would occur outside of desert tortoise fencing. In addition, parking could occur at the offsite O&M facility outside of desert tortoise fencing should that option be selected. Mitigation Measure MM WIL-1 recognizes the need for parking along the transmission access road and at the off-site O&M facility.

A008-32 The commenter requests clarification of which facilities and work areas may be sited outside of desert tortoise exclusion fencing (per Mitigation Measure MM Wil-1 [item 10]). The commenter asks whether access roads outside of exclusion fencing would be associated with linear project components.

In response, only gen-tie line construction and maintenance would occur outside desert tortoise exclusion fencing.

A008-34 The commenter notes that if injured wildlife are found during project activities, CDFG should be notified immediately.

For the Final EIS, Mitigation Measure MM Wil-1 (item 13) has been revised to reflect that CDFG (or a CDFG-approved) veterinary facility will be contacted immediately if injured wildlife are found.

A008-35 The commenter requests clarification in Chapter 2 (Project Description) regarding what activities would occur outside of desert tortoise exclusion fencing.

In response, only gen-tie line construction and maintenance would occur outside desert tortoise exclusion fencing.

A008-36 The commenter states mitigation measures related to evaporation and construction storage ponds (such as Mitigation Measure MM Wil-1 [item 20]) should be specifically addressed in the project's Bird and Bat Conservation Strategy.

The Draft Bird and Bat Conservation Strategy is included as Appendix C9 in the Final EIS. Evaporation and construction storage ponds are included in Section 5.8 of Appendix C9.

A008-37 The commenter states that netting to cover evaporation ponds (see Mitigation Measure MM Wil-1 [item 20]) should be 2 centimeters square, should be installed to prevent sagging, and should be a minimum of 5 feet above the water surface.

In the Final EIS Mitigation Measure MM Wil-1 (item 20, "Cover Evaporation Ponds") has been revised to state the following: "Mesh shall be 2 cm square or smaller, shall be installed to prevent sagging, and shall be a minimum of 5 feet above the surface of the water. Netting with another mesh size or a smaller distance above the water may be installed if approved by the BLM in consultation with CDFG and USFWS."

A008-38 The commenter requests clarification of the types of visual deterrents that would be installed to prevent avian use of evaporation ponds (see Mitigation Measure MM Wil-1 [item 20]). The commenter requests additional information on how these deterrents would supplement exclusionary netting.

Mitigation Measure MM WIL-1 (Wildlife Impact Avoidance and Minimization) item 20 (Cover Evaporation Ponds) has been revised to include the following sentence: "Visual deterrents (e.g., flagging, reflecting tape, or hawk-shaped kites) shall also be used in addition to netting."

A008-39 The commenter requests that the same measures that are used to exclude ravens and other birds and wildlife from evaporation ponds (see Mitigation Measure MM Wil-1 [item 20]) be used for construction water ponds as well.

In the Final EIS Mitigation Measure MM Wil-1 (item 20, "Cover Evaporation Ponds") has been revised to state that "As appropriate, these measures shall also be applied to construction water ponds."

A008-40 The commenter notes that in addition to complying with a Biological Opinion from USFWS, the project would need to comply with the terms and conditions in an incidental take permit from CDFG (see Mitigation Measure MM Wil-2).

In the Final EIS, the first paragraph of Mitigation Measure MM Wil-2 (Desert Tortoise Clearance Surveys, Exclusion Fencing, and Translocation) has been revised to specify that the Project Owner will implement all terms and conditions in an Incidental Take Permit from CDFG.

A008-41 The commenter requests clarification on when desert tortoises would be placed in holding facilities (mentioned on page 4.4-29 of the Draft EIS in Mitigation Measure MM Wil-2 [item 1]) instead of being relocated to a new site.

As described in Section 7 of the Draft Desert Tortoise Translocation Plan for the project (located in Appendix C8 of the Draft EIS), current USFWS guidelines (2011) include a provision that if 5 or fewer tortoises are located on a site, they may be removed from the wild and placed with a USFWS and State-approved program.

A008-42 The commenter states that the fence perimeter should be inspected for tortoises pacing outside the boundary of the fence.

Mitigation Measure MM Wil-2 (item 5, Monitoring Following Clearing) has been revised to reflect this monitoring requirement.

A008-43 The commenter states that project construction activities outside of tortoise exclusion fencing only occur when a Biological Monitor is present.

On page 4.4-30 of the Draft EIS, Mitigation Measure MM Wil-1 states "Any project activities during construction, O&M, or decommissioning that take place outside of the permanently fenced site within desert tortoise habitat, and have the potential to disturb native soils or vegetation, shall be subject to fencing and preconstruction clearing survey requirements, or shall take place only while a Biological Monitor is on-site."

A008-44 The commenter states that a pre-construction nesting bird survey (Mitigation Measure MM Wil-3) should be conducted a maximum of 2-3 days before the start of construction because 2 to 3 days reflects the amount of time necessary to build a nest.

In the Final EIS, Mitigation Measure MM Wil-3 (item 2) has been revised to reflect that a second pre-construction survey for nesting birds will be required 2 to 3 days prior to the start of construction activity.

A008-45 The commenter suggests that the nest monitoring plan (Mitigation Measure MM Wil-3 [item 4]) should be prepared as part of the project's Bird and Bat Conservation Strategy (BBCS) rather than as a separate plan.

In the Final EIS, Mitigation Measure MM Wil-3 (Pre-construction Nest Surveys and Impact Avoidance Measures for Migratory and Nesting Birds) has been revised to clarify that a Nesting Bird Management Plan will be prepared by the project owner (including the monitoring plan mentioned in item 4). This plan may be incorporated into the BBCS as a separate chapter.

A008-46 The commenter states that reports of pre-construction nest surveys (per Mitigation Measure MM Wil-3 [item 5]) should include documentation of delineation of avoidance zones, including location information, photographs, and descriptions of the method used to delineate avoidance zones.

For the Final EIS, Mitigation Measure MM Wil-1 (item 5) has been revised to specify that "If active nests are detected during the surveys, the report shall include descriptions of avoidance zones and methods used to determine avoidance zones and a maps or aerial photos identifying the nest locations and the boundaries of no-disturbance buffer zones."

A008-47 The commenter notes that removal or relocation of an active nest (per Mitigation Measure MM Wil-3 [item 7]) would require a permit under the Migratory Bird Treaty Act (MBTA), and relocation of any eagle nests (either active or inactive) would also require a permit.

Removal or relocation of an active nest would constitute take of the nest, which is not permissible under the MBTA in this context. Although permits may be obtained to import migratory birds, collect such birds for scientific purposes, or destroy depredating migratory birds, permits are not generally available under the MBTA for incidental take of migratory birds or their nests caused by industrial operations, such as construction of the proposed project. The Bald and Golden Eagle Act permits take of eagles only with a permit obtained through consultation with the USFWS. No changes have been made to the EIS in response to this comment.

A008-48 The commenter requests data from winter 2011-2012 golden eagle surveys (conducted per Mitigation Measure MM Wil-5 [item 1]).

These data are provided in Appendix C7 of the Final EIS (Winter Golden Eagle Report). During winter surveys, one adult golden eagle was observed soaring just north of Interstate 10 near the southeastern boundary of the 10-mile radius study area (on January 10, 2012). Eight golden eagle nests or probable nests were detected as well, but none appeared to have been active recently.

A008-49 The commenter suggests that nesting surveys for golden eagle should determine nesting productivity and chronology, in addition to occupancy.

For the Final EIS, Mitigation Measure MM Wil-5 (Golden Eagle Pre-construction and Construction Phase Surveys) has been revised to specify that "Nesting season surveys will determine occupancy, productivity, and chronology of known or newly discovered nesting territories within the 10-mile radius."

A008-50 The commenter states that determining winter season habitat use by golden eagles would require much more rigorous survey methods than have been used to date by the Applicant. The commenter recommends reviewing records from the March 2, 2012 meeting between USFWS, BLM, NPS, and the Applicant for more detail regarding survey methods.

Winter season surveys were conducted by Bloom Biological between December 22, 2011 and February 7, 2012. Survey results are included as Appendix C7 in the Final EIS. BLM considers these surveys to have been adequately rigorous.

A008-51 The commenter states that migrating eagles may use the project site during winter, spring, and fall, and that floater eagles may be present any time of year; therefore, eagle use (and potential impacts on eagles) cannot be adequately assessed without data collected throughout the year.

As noted in Appendix C9 of the Final EIS (Draft Bird and Bat Conservation Strategy), USFWS has previously recommended that the project Owner obtain three years of nesting season and winter season golden eagle activity data for a 10-mile radius surrounding the project site. The Draft EIS contains 2010 breeding season data in the area from the Desert Sunlight EIS (BLM 2011b) and supporting documents. No winter or breeding season data on golden eagle activity were collected in the area during 2011. The Desert Sunlight project owner is required by Mitigation Measure WIL-6 of the Desert Sunlight Final EIS, to obtain breeding season golden eagle activity over the same area each year throughout the active construction phase for that project. These data sets will provide breeding season golden eagle activity for the 2012 and 2013 breeding season throughout the recommended 10-mile radius surrounding the project site. The project Owner will coordinate with USFWS and with other project applicants in the area in order to assess golden eagle occurrence throughout the area without duplicating the efforts of other project owners.

A008-52 The commenter suggests adding number of observation minutes and nest status to the minimum data gathered during winter season golden eagle surveys.

Mitigation Measure MM Wil-5 (item 2) has been revised as requested for the Final EIS.

A008-53 The commenter states that the Monitoring and Adaptive Management Plan for golden eagle surveys (per Mitigation Measure MM Wil-5 [item 5]) should be approved by BLM in consultation with USFWS, not vice versa.

Mitigation Measure MM Wil-5 (item 5) has been revised as requested for the Final EIS.

A008-54 The commenter states that the Monitoring and Adaptive Management Plan for golden eagle surveys (per Mitigation Measure MM Wil-5 [item 5]) should be developed prior to the start of construction activities.

This suggestion is acknowledged; however, Mitigation Measure MM Wil-5 has not been revised to reflect this requirement. As stated in MM Wil-5 in the Draft EIS, a Golden Eagle Monitoring and Management Plan shall be prepared and implement if an occupied nest is detected within 10 miles of the project site or gen-tie line alignment.

A008-55 The commenter states that the survey protocols that have previously been conducted for the project have not been adequate to meet the requirements of bullets 2 and 5 in Mitigation Measure MM Wil-6 (Bird and Bat Conservation Plan). The commenter expresses particular concern about lack of surveys during migration season and lack of on-site unlimited distance long sit point counts. The commenter states that bird point counts do not provide adequate information about birds migrating through the site or using microphyll woodland on the site.

Section 7.2 of the Draft Bird and Bat Conservation Plan (Appendix C9 in the Final EIS) includes additional information on the project's approach to meeting mitigation requirements related to bird monitoring. BLM considers the approach outlined in Appendix C9 adequate to meet the requirements in Mitigation Measure MM WIL-6.

A008-56 The commenter states that documentation for the Bird and Bat Conservation Plan (per Mitigation Measure MM Wil-6) should also include raw data sheets from bird surveys.

For the Final EIS, Mitigation Measure MM WIL-6 has been revised to reflect that documentation for the Bird and Bat conservation Plan will include raw data sheets from bird surveys.

A008-57 The commenter notes that no take is permitted under the Migratory Bird Treaty Act, but that USFWS provides recommendations and feedback on measures proposed to minimize impacts on birds and take into account documented efforts to adopt such measures when deciding whether or not to prosecute for any take of migratory birds.

This comment is acknowledged. No further response is warranted.

A008-58 The commenter states that baseline surveys of raven abundance (per Mitigation Measure MM Wil-8) should be conducted immediately to ascertain pre-project numbers.

The project's Raven Management Plan is included as Appendix C14 in the Final EIS. Baseline data for raven nesting activity will be collected during the first year of project construction.

A008-59 The commenter requests adding "nest" to "perch/roost/nest" sites in the first paragraph of Mitigation Measure MM Wil-8 (Raven Monitoring, Management, and Control Plan).

For the Final EIS, Mitigation Measure MM Wil-8 has been revised as suggested.

A010-4 The commenter notes that the upper Chuckwalla Valley is an important habitat linkage and recommends that the BLM work closely with the USFWS to protect habitat connectivity for special status species, including the desert tortoise. The commenter further recommends that the Final EIS identify sufficient lands for habitat compensation.

Please see responses to Comments A008-6 and A010-21.

A010-19 EPA requests that the Final EIS update the consultation process and include the Biological Opinion (BO) as an appendix. EPA recommends updating mitigation measures based on the BO, explaining how the reduced footprint Alternatives 6 and 7 differentially affect the Palen-Ford WHMA, identifying specific measures to reduce impacts to eagles and comply with the MBTA and Bald and Golden Eagle Protection Act (BGEPA), discussing the applicability of the recent Eagle Conservation Plan Guidelines to the proposed project, describing as necessary compensatory mitigation to reduce the effect of permitted mortality to a no-net-loss standard, and including design practices to minimize bird collisions with power lines.

The BLM is currently undergoing consultation with the USFWS under Section 7 of the Endangered Species Act, and a Biological Opinion (BO) has not yet been issued. The BO is not expected to be completed in time for inclusion in the Final EIS. Measures to reduce or avoid impacts to biological resources are identified in the Final EIS to mitigate impacts in satisfaction of NEPA. The project owner will be required to implement all measures adopted in the BLM's Record of Decision (ROD) as well as all additional conditions included in the BO. Measures to reduce or avoid impacts to desert tortoise, burrowing owl, golden eagles, and Nelson's bighorn sheep are included in Sections 4-3 and 4.4 of the Final EIS. Alternatives 6 and 7 have the same project boundaries, and would impact the Palen-Ford WHMA in the same way (46 acres). Table 4.4-1 has been revised to reflect this. Specific measures to reduce impacts to eagles are included in MM

Wil-5, and eagles are also addressed in the project's Draft Bird and Bat Conservation Strategy (Appendix C.9 of the Draft EIS). Mitigation Measure WIL-1, item 6, requires the project owner to design, install, and maintain all transmission lines and electrical components in accordance with the Avian Power Line Interaction Committee's (APLIC's) Suggested Practices for Avian Protection on Power Lines (APLIC 2006) and Mitigating Bird Collisions with Power Lines (APLIC 1994) to minimize the likelihood of bird electrocutions and collisions. The BBCS is in draft form and is being developed in consultation with the USFWS using the most current guidance.

A010-20 EPA states that to support desert tortoise habitat connectivity, the DHSP should not extend its eastern border beyond that of Desert Sunlight. EPA states that the Final EIS should confirm its conclusions regarding habitat connectivity with the USFWS, should consider habitat connectivity under various climate change scenarios, and address these issues and related research in the project analysis.

Please see response to Comment A008-6.

A012-1 The commenter summarizes the DHSP. The commenter states that the Western Chuckwalla Valley, including the proposed ROW, is a critical linkage area for desert tortoise and numerous other species between populations in the Mojave and Colorado/Sonoran deserts, and one of the few areas between northern and southern tortoise populations where topographic and climatic features minimally constrain desert tortoise habitat suitability. The commenter states that the area between Kaiser Road and Eagle Mountain Road supports some of the highest densities of desert tortoises, and the vicinity of the proposed project, particularly west of Kaiser road, is important for tortoise connectivity. The commenter requests that the Final EIS analyze the impacts that the project will have on connectivity to the desert tortoise and how this impact will be minimized or mitigated.

Please see response to Comment A008-6.

A012-2 The commenter does not recommend placing animals in holding facilities except under rare and project specific conditions. The commenter requests that the BLM clarify under what conditions the project owner would consider this method instead of translocation of tortoises to a recipient site.

Please see response to Comment A008-41.

A012-3 The commenter states that project activities outside of tortoise exclusion fencing should only occur when a Biological Monitor is on site and monitoring activities.

Please see response to Comment A008-43.

A012-4 The commenter states that security fencing should be installed contiguous to permanent desert tortoise exclusion fencing to minimize risk of wildlife jumping over desert tortoise exclusion fencing (or burrowing under security fencing).

Please see response to Comment A008-4.

A012-5 The commenter requests that BLM follow the new CDFG 2012 staff report on burrowing owl mitigation to describe habitat compensation for burrowing owls.

As stated in the 2012 CDFG Staff Report on Burrowing Owl Mitigation, the current scientific literature supports the conclusion that mitigation for permanent habitat loss necessitates replacement with an equivalent or greater habitat area for breeding, foraging, wintering, dispersal, presence of burrows, burrow surrogates, presence of fossorial mammal dens, well drained soils, and abundant and available prey within close proximity to the burrow. Mitigation Measure WIL-4 (Burrowing Owl Impact Avoidance, Minimization, and Compensation Mea-sures) requires 19.5 acres of habitat compensation land for each single burrowing owl or breeding pair of burrowing owls that is displaced by construction of the project. If burrowing owls are observed to occupy the compensation lands, then the replacement ratio will be 13.0 acres per pair or single bird. However, the requirements for habitat compensation for all biological resources outlined in Mitigation Measure VEG-6 would require the project owner to acquire and preserve in perpetuity lands at a ratio of 1:1, 3:1, or 5:1 depending on vegetation community and whether impacts are within a wildlife management area. Therefore, total acreages acquired for this project would greatly exceed that required by WIL-4 specifically for burrowing owls. Because of the location and habitat requirements set forth in Mitigation Measure VEG-6, compensation lands would also benefit burrowing owls. Therefore, the overall compensation strategy for the DHSP would adequately mitigate for impacts to burrowing owl habitat, and would be consistent with CDFG's current recommendations.

A012-9 The commenter states that BLM should work with the project owner to route high energy transmission lines (34.5 kV lines between the switchgear and substation) underground.

Please see response to Comment A008-1.

A012-10 The commenter states that BLM should require any guy wires to be outfitted with bird deterrence devices in accordance with the Avian Power Line Interaction Committee guidelines.

Please see response to Comment A008-3. No guy wires would be required for any project features.

A012-14 The commenter states that BLM should include an analysis of the wildlife mortality risk from road traffic in the discussion of project impacts.

Please see response to Comment A008-29.

A012-15 The commenter requests that BLM notify CDFG immediately upon the discovery of injured or dead wildlife on the project site.

The commenter's request is already required by Mitigation Measure WIL-1, items 13 and 14.

A012-16 The commenter states that BLM should require netting used to cover evaporation ponds to be 2 centimeters square or smaller (to prevent bird entanglement), not

1.5 inches square. The commenter states that netting should be installed to prevent sagging and should be a minimum of 5 feet above the water surface.

Please see response to Comment A008-37.

A012-17 The commenter requests that BLM clarify what types of visual deterrents would be installed to dissuade avian use of evaporation ponds, as well as the specific goals of such deterrents and how their use supplements exclusionary netting.

Please see response to Comment A008-38.

A012-18 The commenter states that BLM should require that any kit fox burrow excavation should occur only by hand, not with mechanized equipment.

Mitigation Measure WIL-7 (Desert Kit Fox and American Badger Avoidance) has been revised to require burrow excavation by hand only and not by mechanized equipment.

B005-6 The commenter notes that Table 4.4-4 of the Draft EIS describes in increase of 270,000 acres of impacts to desert tortoise habitat compared to impacts of existing projects (132,000 acres). The commenter questions whether recovery of the desert tortoise can occur with this level of intensity of regional development.

For reference, of the total habitat within the Colorado Desert Recovery Unit (approximately 7.6 million acres), existing development accounts for 1.8% of that area and future proposed development accounts for 3.5% of that area, for a total loss of 5.3% of the habitat within the recovery unit (see Section 4.4.16). However, as described in that section, the contribution of the proposed project or its alternatives to cumulative habitat loss in connection with other reasonably foreseeable future projects, even for moderate to low-quality desert tortoise habitat, is considered substantial, given the species' decline and the present and future threats.

B006-17 The commenter states that while the Draft EIS recognizes the desert kit fox is protected under CCR Title 14 Section 60 and occurs on site, no surveys were done to quantify the density of desert kit fox that will be displaced and "taken" by the proposed project. The commenter states that the neighboring Genesis project required take permits from the CDFG, which BLM states are not necessary; the commenter requests these permits be sought for DHSP, especially since canine distemper broke out among foxes near Genesis, likely resulting from habitat disturbance. The commenter states that a revised or supplemental Draft EIS should more carefully survey kit fox territories, analyze impacts, and provide mitigation to protect this rare and declining species.

Please see Section 4.4-7 and Mitigation Measure WIL-7 for a discussion of impacts and mitigation strategy for the desert kit fox.

B006-18 The commenter states that the desert tortoise, an in-decline and protected species, recovery unit occurring at the project site is genetically unique and in a high rate of decline; the Draft EIS does not identify and consider the localized impact to this recovery unit. The commenter states that the methodologies in the Draft EIS may underestimate the number of and impacts to desert tortoise, noting this in similar projects and providing specific methodological criticism. The commenter states that a 1:1 mitigation ratio is not robust enough and still represents net loss, that mitigation lands need to be conserved in perpetuity and that translocation depends on a draft, not final, translocation plan that violates Independent Science Advisors (ISA) recommendations and could lead to high mortality rates. The commenter recommends a minimum 5:1 mitigation ratio for tortoise habitat, relocation only to areas secured for conservation in perpetuity, and an analysis of the significance of desert tortoise impacts.

As described in the Final EIS (Section 4.4.7 under the heading "Direct Effects – Desert Tortoise"), the proposed solar facility site and surrounding area is modeled as relatively low value habitat for desert tortoise, rendering a 1:1 mitigation ratio for loss of habitat reasonable for this project. The U.S. Geological Survey (USGS) Desert Tortoise Habitat Model (Nussear et al. 2009), using a scale of 0.0 to 1.0, assigns a value of 0 to 718.6 acres of the proposed project's solar field, a value of 0.1 to 484 acres of the proposed project's solar field, and a value of 0.2 to the remaining 4.6 acres of the solar field. Field surveys of the habitat value and tortoise presence confirmed these modeling results for the DHSP site. BLM recognizes the importance of genetic uniqueness of the population of desert tortoise in the recovery unit, and Mitigation Measure MM VEG-6 requires that the compensation lands for impacts to desert tortoise shall be within the Colorado Desert Tortoise Recovery Unit. MM VEG-6 includes an estimate of total cost to acquire and manage compensation lands, based on current estimates of land values, evaluation and transaction costs, habitat improvements, and long-term management. According to MM VEG-6, the project Owner would be required to provide the compensation lands, or to provide financial assurance sufficient to carry out the habitat acquisition and management, no later than 30 days prior to initiation of ground disturbance. The Applicant is currently working with Wildlands Inc. to develop a suitable compensation strategy addressing the resources and ratios described in MM VEG-6 (see Appendix C12).

The "significance" of desert tortoise (and other listed wildlife species) impacts from a CEQA perspective in section 4.4.17 (Draft EIS page 4.4-64) and are determined to be significant and unavoidable. Please note that this conclusion is provided for future CEQA decision-making and is not required under NEPA.

B006-19 The commenter states that the Draft EIS fails to mention the fatalities that have been documented to occur from birds running into reflective surfaces, has not conducted adequate bird surveys, fails to quantify the number of birds (rare, migratory, or otherwise) that use/traverse the project site, and does not evaluate impacts to birds. The commenter states that failure to provide baseline data violates NEPA and potentially the MBTA. The commenter states that the draft Bird and Bat Conservation Strategy in Appendix C.9 is highly inadequate, providing only BMPs without avian or bat specific compensation; the Final EIS should require clear language requiring that mitigation lands support habitat for impacted these species. The commenter states that a revised or supplemental Draft EIS needs to adequately identify the migratory bird issues on site and evaluate the impact to those species in light of the guidance in Executive Order 13186.

To the contrary, direct and cumulative effects to birds from construction, operation, and decommissioning of both the solar field alternatives and gen-tie alternatives are described in detail in Section 4.4 of the Draft EIS (pages 4.4-6, 4.4-11 through 4.4-15). Solar panel light, glare, and collision risk are described in detail on page 4.4-21. Appendix C-4 of this Final EIS presents survey results for avian point counts conducted in 2011, which quantifies bird use of the project site. Appendix C-20 presents a Gila woodpecker focused survey report. Appendix C-7 presents golden eagle survey results. The commenter does not specify any specific deficiency in the Applicant's draft Bird and Bat Conservation Strategy (Appendix C-9); however, it is noted that the strategy requires review and approval by USFWS and CDFG (see MM WIL-6 on Draft EIS page 4.4-36.

B006-20 The commenter states that because of declines, the burrowing owls on the project site are important to conservation efforts, and a revised or supplemental Draft EIS should discuss their significance to regional distributions. The commenter states that proposed compensation land for burrowing owls is too low, should be based on foraging territory and number of owls rather than burrow data, and should require use of native habitats on undisturbed lands protected in perpetuity. The commenter states that passive relocation may reduce owl habitat, create competition, and result in "take." The commenter states that no monitoring for passive relocation is identified in the Draft EIS, and mitigation should be required to construct two burrows for each burrow destroyed.

Refer to response to Comment A012-5 regarding habitat compensation. With regard to the comment about replacement burrows, the commenter is referred to Mitigation Measure WIL-4 (Burrowing Owl Impact Avoidance, Minimization, and Compensation Measures), item 5 (b), which describes the requirements for the construction of at least two replacement burrows within or near the project area if fewer than two suitable unoccupied burrows are available in the area. Item 5 (d) of this measure describes the monitoring and reporting required for passively relocated owls.

B006-21 The commenter states that the Draft EIS Section 3.4 is inconsistent with Appendix C.7 regarding the number of golden eagle nests near the project and that it is unclear how territorial boundaries were identified and quantified. The commenter states that the Draft EIS fails to present how to mitigate the loss of a substantial amount of foraging habitat (potentially enough to prevent support of a nesting pair) from this project and other proposed projects. The commenter states that the Draft EIS does not clearly analyze the impacts to and mitigations for the golden eagle under the Bald Eagle and Golden Eagle Protection Act, which prohibits, except under certain specified conditions, the take, possession, and commerce of such birds.

Please see the response to Comment A008-9 regarding golden eagle mitigation and the response to Comment F001-108 for updated information regarding golden eagle occurrence in the region. Please also note that the nests located on utility poles during the Winter 2012 study were probable nests but current use and the species associated with the nests have not been confirmed at this time. None of the nests appeared to be recently active at the time of the surveys.

B006-22 The commenter states that the Draft EIS fails to quantify the number of badgers that would be affected by the proposed project, and that based on home range sizes, the project could displace at least one badger territory. The commenter states that passive relocation of badgers into suitable habitat may result in "take," that excluding badger from the site is likely to generate competition, and that the recirculated or supplemental Draft EIS needs to include an actual analysis of impacts to badgers from the proposed project.

Impacts to American badger are adequately addressed in Section 4.4.7 of the EIS, and Mitigation Measures VEG-6 (providing a minimum of 1:1 habitat compensation) and WIL-7 (Desert Kit Fox and American Badger Impact Avoidance) would minimize impacts to this species. No changes have been made to the Final EIS in response to this comment.

B006-24 The commenter states that the Draft EIS fails to address insects on the project site, providing no surveys or evaluations, despite the frequency of rare and endemic species in deserts. The commenter states that a revised or supplemental Draft EIS must include an analysis of rare insects on the proposed project site and must incorporate recent research on the impacts of solar panels on invertebrates.

While the BLM recognizes that numerous species can and do occur on the project site (including the desert leaf-cutting ant addressed in Section 3.4.5), an exhaustive inventory is neither required by NEPA nor would it change the conclusions of the analysis. Under federal and state environmental regulations, the assessment of impacts to species focuses on special-status species. As described in Section 3.4, no special-status invertebrates (as designated by BLM, USFWS, CDFG, or Riverside County) are known from the project area. While it is likely that populations of invertebrates inhabit the site, there are no large-scale studies or peer-reviewed datasets that would suggest any species could occur that would rise to the level of special-status species warranting separate analysis and mitigation under NEPA or CEQA. Regarding the comment and referenced studies about the effects of solar photovoltaic (PV) panels on invertebrates, the referenced studies focus primarily on aquatic insects that use polarized light to orient to water, and that can therefore mistake polarized light reflected by PV panels for light reflected by water and will lay eggs on them. The panels can then constitute "ecological traps." However, large populations of aquatic insects are not expected to occur at or near the solar field site, and the nearest body of water is Lake Tamarisk which is located over 3 miles south of the site. Therefore, the solar field site is not expected to have any measurable impact on regional aquatic insect populations, or contribute to a trend toward federal listing.

B006-26 The commenter states that while the Draft EIS recognizes impacts to habitat connectivity, it does not identify minimization or mitigation for this impact and notes that the whole project site is located within an area identified as an "essential connectivity area" for wildlife identified by the California Essential Habitat Connectivity Project. The commenter states that additional analysis should be included in a revised or supplemental Draft EIS.

Please see response to Comment A008-6.

B008-21 The commenter states that the proposed project site will remove 1200 acres of a desert tortoise connectivity corridor that connects designated recovery units and management areas; this connectivity currently helps support gene flow and genetic variation that help maintain population health. The commenter cites the effects of fragmentation and climate change on desert tortoise populations, which further supports the need for habitat connectivity. The commenter states that tortoise translocation can result in up to 50% mortality and requests that the project not be sited adjacent to desert tortoise critical habitat.

Please see response to Comment A008-6.

B008-22 The commenter states that the Applicant should be required to conduct golden eagle nest surveys instead of relying on data from other projects that may be outdated. The commenter notes that loss of foraging habitat is considered “take” under the Bald and Golden Eagle Protection Act, and that there are six golden eagle nests within 20 miles of the project site, including active territory within 1.5 miles of the site.

Please see the responses to Comments A008-9, A008-48, A008-49, A008-50, A008-51, A008-52, F001-44, F001-50, F001-101, and F001-108.

B009-6 The commenters state that the Final EIS should include the USFWS-recommended alternative (which would remove two 40-acre parcels on the eastern border of the proposed project from development) in order to preserve habitat connectivity. The commenters state that the Penrod et al. (2012) study cited in rejecting the USFWS alternative was intended primarily to identify probably least cost pathways between protected landscape blocks only. The commenters contend that the study does not reflect actual or probable movements of desert tortoise over larger areas of natural habitat. In addition, the commenters note that Figure 58 of the Penrod et al. (2012) report shows the proposed project in an area of desert tortoise movement and potential core habitat.

Figure 58 in the Penrod et al. 2012 report (A Linkage Network for the California Desert) is based on the USGS desert tortoise habitat model (Nussear et al. 2009). See page 134 of Penrod et al. (2012). BLM contends that the USGS desert tortoise habitat model supports the view that the area to the east of the DHSP site is marginal desert tortoise habitat and is not critical for connectivity. In addition, please see response to Comment A008-6.

B009-11 The commenter states that the impact analysis on wildlife movement was based on the assumption that only a small portion of the DSSF to the north would be constructed. The commenter requests an explanation of this assumption and its effects on cumulative impact analysis.

The DHSP impact analysis considers existing conditions at the time of initiation of analysis (September 2011); at this time, the Desert Sunlight Solar Field was partially constructed. However, cumulative analysis of the project includes both existing and reasonably foreseeable projects. As stated in Section 2.1.2: Connected or Cumulative Actions, "The approved gen-tie for the Desert Sunlight Solar Farm project and the Desert Sunlight Solar Farm itself (see Figure 4.1-1 in Appendix A) are considered foreseeable actions for the purposes of this analysis and are addressed as cumulative actions." The cumulative analyses throughout the sections of Chapter 4 consider the DSSF at full buildout, not partially constructed. Section 4.4.16: Cumulative Effects to Wildlife, specifically states "The analysis of cumulative impacts to wildlife movement and habitat connectivity (below) expands on the analysis presented in Section 4.4.7, by considering the cumulative impacts of the proposed project, the Desert Sunlight project, and other projects in the area." The Wildlife Movement and Habitat Connectivity subsection of Section 4.4.16 states that "Desert Sunlight, now under construction, would largely prevent movement from the DHSP site northward and would eliminate much of the suitable movement habitat north of the DHSP." This section and other cumulative analysis sections in Chapter 4 thus consider the full buildout of the DSSF, not a small portion of it.

B009-12 The commenter does not believe that compensatory habitat will offset effects on wildlife movement, and recommends that the EIS consider the USFWS-recommended alternative described in B009-6. The commenter further recommends that the private parcel between the two BLM parcels to be eliminated under this alternative should be acquired for conservation.

Please see responses to Comments A008-6 and B009-6.

B011-9 The commenter states that the EIS fails to analyze and mitigate impacts to desert tortoises.

See response to Comment B006-18.

B011-10 The commenter states that the EIS fails to adequately analyze and mitigate impacts to kit foxes.

To the contrary, the EIS analyzes the potential spread of canine distemper virus amongst desert kit fox as a result of the project, and requires mitigation to ensure testing, vaccination, and monitoring of kit foxes for distemper (see MM WIL-7).

B011-11 The commenter states that the EIS fails to adequately analyze and mitigate impacts to desert dry wash woodlands, suggesting that alternatives that avoid this plant community should be evaluated.

To the contrary, the EIS carefully and quantitatively evaluates the project's effects on desert dry wash woodland. Alternatives 6 and 7 avoid substantial portions of desert dry wash woodland that would be affected by Alternatives 4 and 5, and mitigation to this plant community is required per the provisions of the NECO plan.

D002-10 The commenter notes that the Draft EIS shows that a cumulative total of almost 400,000 acres of desert tortoise habitat would be lost under the cumulative project scenario. The commenter questions whether there is enough offsite compensatory habitat to mitigate this overall loss.

Please see response to Comment A010-21. Mitigation Measure VEG-6 would compensate for losses to desert tortoise habitat as a result of the project; other projects in the cumulative scenario would compensate for losses to tortoise habitat through their own decision processes. It is not currently known whether enough off-site compensatory habitat exists, but the Applicant and other solar developers along the I-10 corridor are working with Wildlands, Inc. and other habitat management groups to secure appropriate lands to mitigate anticipated effects.

F001-3 The commenter states that in Table ES-1, Significance Criterion WIL-2 does not correspond with the cumulative analysis in Section 4.4.16 which concludes that because the DHSP project site is modeled as low habitat value and has low density of tortoises and their sign, " … the contribution of the proposed project or its alternatives would be relatively minor." [Draft EIS at 4.4.62]. The Applicant references Comment F1-128 for further information.

The requested changes have been made in the Final EIS.

F001-42 The commenter recommends specific revisions to page 3.4-1, Section 3.4.1, including the addition of BGEPA definitions of "take" and "disturb," and USFWS regulations regarding take and disturbance authorization.

The requested changes have been made in the Final EIS.

F001-43 The commenter recommends specific revisions to page 3.4-8, Section 3.4.3, including the completion of biological resource surveys for Alternative E in spring 2012, the inclusion of Alternatives B, C, and D in DSSF biological surveys, and the addition of the completed BRTR supplement for Alternative E included in appendix C.

The requested changes have been made in the Final EIS.

F001-44 The commenter recommends specific revisions to page 3.4-9, Section 3.4.3, including the completion of desert tortoise, Mojave fringe-toed lizard surveys for Alternative E in spring 2012, focused breeding season surveys for Gila woodpeckers on the solar facility site in spring 2012, and the addition of new winter 2011-12 surveys for golden eagles.

The requested changes have been made in the Final EIS.

F001-45 The commenter requests that in Section 3.4.5, Special Status Wildlife Species (page 3.4-11), BLM update special-status wildlife occurrences on gen-tie alignment Alternative E according to the BRTR Supplement, and add black-tailed gnatcatcher.

The requested changes have been made in the Final EIS.

F001-46 The commenter recommends specific revisions to page 3.4-18, Section 3.4.5, to state that the nearest documented desert tortoise locations are on the DSSF Solar Farm project site, north of the proposed DHSP solar facility site, and at the Red Bluff Substation site.

The requested changes have been made in the Final EIS.

F001-47 The commenter recommends specific revisions to page 3.4-19, Section 3.4.5, to state that no live desert tortoises or recent sign were observed within the survey area for gen-tie Alternative E.

The requested changes have been made in the Final EIS.

F001-48 The commenter recommends specific revisions to page 3.4-21, Section 3.4.5, to omit the statement that surveys for Mojave fringe-toed lizards were not completed in this area, and to cite Appendix C BRTR for field survey details.

The requested changes have been made in the Final EIS.

F001-49 The commenter recommends specific revisions to page 3.4-21, Section 3.4.5, to include gen-tie alignment alternatives and project area as suitable for the rosy boa.

The requested changes have been made in the Final EIS.

F001-50 The commenter requests that Section 3.4.5, Special Status Wildlife Species (page 3.4-21), be updated to state that Golden Eagle nesting behavior may include “nest decorating,” that eagles may abandon nests without “laying eggs,” that inactive nests in the DHSP area were documented in the DSSF EIS and its appendices, that updated BLM records indicate a total of 10 nests within a 10-mile radius of the DHSP solar facility site, and that there was early breeding season activity at one of these nests in 2012 but there was no reproduction and no golden activity there by late May, 2012.

The requested changes have been made in the Final EIS.

F001-51 The commenter recommends specific revisions to page 3.4-22 to 3.4-23, Section 3.4.5, to include gen-tie Alternative E desert tortoise surveys conducted in 2012, to specify burrowing owl observation locations as on the solar facility site and not Alternative E, and to state that the project study area provides suitable habitat for burrowing owls.

The requested changes have been made in the Final EIS.

F001-52 The commenter recommends specific revisions to page 3.4-24, Section 3.4.5, to state that in spring 2012, all desert dry wash woodland habitat was surveyed to determine presence or absence of breeding Gila woodpeckers, but no further Gila woodpecker observations were recorded (according to a report in preparation) during protocol point counts of focused breeding season surveys.

The requested changes have been made in the Final EIS.

F001-53 The commenter recommends specific revisions to page 3.4-25, Section 3.4.5, to include the black-tailed gnatcatcher among special status birds present or potentially occurring in the project area. The commenter adds that loggerhead shrikes and black-tailed gnatcatchers were observed in Alternative E in spring 2012.

The requested changes have been made in the Final EIS.

F001-54 The commenter requests that Section 3.4.5, Special Status Wildlife Species (page 3.4-21), be updated to state that the Coachella Valley round-tailed ground squirrel "was not observed on the Gen-Tie Alternative E alignment during field surveys in spring 2012," and that primary habitat would only be intersected by Alternative E over "the portion of its length crossing Aeolian sands."

The requested changes have been made in the Final EIS.

F001-55 The commenter recommends specific revisions to page 3.4-27, Section 3.4.5, to state that desert kit fox burrows were recorded on Alternative E, and that suitable habitat occurs on all gen-tie alternative alignments.

The requested changes have been made in the Final EIS.

F001-56 On page 3.4-30, Section 3.4.5, the commenter recommends updating the publication date of the BLM connectivity research report, and providing a citation if available.

The report is not yet available, and the last sentence of the paragraph was deleted.

F001-79 The commenter recommends specific revisions to pages 4.3-14 and 4.3-15, Section 4.3.7, MM VEG-2, including omission of the specific distance designation (500 m) for tortoise relocation and a statement that "desert tortoises will only be handled according to provisions approved by USFWS and CDFG, to be specified in the Desert Tortoise Translocation Plan."

Revisions to Mitigation Measure VEG-2 have been made, consistent with the commenter's recommended edits.

F001-98 The commenter requests that the Final EIS reconciles the statement on Draft EIS page 4.4-65 that Alternatives 4 through 7 would "contribute considerably to the cumulatively significant impacts of habitat loss for special-status wildlife species in the NECO planning area, and reduced wildlife movement and connectivity in the upper Chuckwalla Valley" with the statement on page 4.4-63 that "the contribution of the proposed project or its alternatives would be relatively minor."

The conclusions provided to address CEQA significance in the Draft EIS include the loss of habitat for special-status wildlife in addition to loss of movement for wildlife. The BLM considers this loss separately for impacts to wildlife movement alone for the purposes of NEPA. No changes to the document have been with regard to this comment.

F001-101 The commenter requests that BLM update the first paragraph of page 4.4-1 to reflect the Applicant's 2011-2012 golden eagle surveys, 2012 nesting surveys for

Gila woodpecker, and 2012 surveys of gen-tie Alt E for desert tortoise, burrowing owl, desert kit fox, and Mojave fringe-toed lizard, and provides specific revisions.

The requested changes have been made in the Final EIS.

F001-103 The commenter states that the last paragraph of page 4.4-5 should state that wildlife mortality "could" (not "would") be substantial.

The requested changes have been made in the Final EIS.

F001-104 The commenter requests that the Final EIS qualify the analysis on Draft EIS page 4.4-7 of potential desert tortoise impacts by summarizing the low habitat quality values assigned to the project site by the 2009 USGS Desert Tortoise Habitat Model. The commenter recommends specific text revisions.

The commenter's suggested revisions have been partially adopted in the Final EIS . Despite the presence of habitat mapped as low value by the USGS model, the site supports relatively intact habitat, and desert tortoise sign was detected during surveys conducted by the Applicant.

F001-105 The commenter states that the first paragraph of page 4.4-8 should state that tortoise eggs "could" (not "would") be overlooked.

The suggested change has not been incorporated into the Final EIS, as the change does not substantially change the meaning of the sentence.

F001-106 The commenter states that page 4.4-10 should mention a Consistency Determination from CDFG in addition to an Incidental Take Permit from the USFWS.

The requested changes have been made in the Final EIS.

F001-107 The commenter recommends revisions to the Mojave fringe-toed lizard discussion on Draft EIS page 4.4-10 to better explain why the project site does not provide suitable habitat for this species.

The requested changes have been made in the Final EIS.

F001-108 The commenter recommends revision of the golden eagle discussion on Draft EIS pages 4.4-12 thought 4.4-13 to reflect nesting data obtained since publication of the Draft EIS.

The requested changes have been made in the Final EIS.

F001-109 The commenter recommends revisions to the second full paragraph of page 4.4-14 to incorporate additional winter and spring surveys for wildlife.

The requested changes have been made in the Final EIS.

F001-110 The commenter recommends a revision to the first paragraph of the "Wildlife Movement" section of page 4.4-17 to state that the commencement of analysis for the EIS began in September 2011.

The requested changes have been made in the Final EIS.

F001-111 The commenter recommends revisions to Draft EIS page 4.4-17 to further substantiate the project's limited effect on wildlife movement.

The requested changes have been made in the Final EIS.

F001-112 The commenter requests supplementation of the Wildlife Management Area discussion in Draft EIS page 4.4-8 with language explaining that, which the Palen-Ford WHMA does not overlap the northeastern parcel of the project site, the WHMA was specifically established to protect dunes and playas (BLM and CDFG 2002), features which — along with the Mojave fringe-toed lizard they support — do not exist on the project site, and that the project does not affect resources within the WHMA for which the WHMA was designated.

The requested changes have been partially incorporated into the Final EIS. The Northern and Eastern Colorado Desert Coordinated Management Plan (NECO) (BLM and CDFG 2002) describes the establishment of multi-species WHMAs in the area, including Palen-Ford. The document describes the protection of Palen Dunes, Palen Dry Lake, and the Mojave Fringe-Toed lizard, but does not specifically state that these resources are the sole reason for establishing the Palen-Ford WHMA; the WHMA is not referenced in relation to these resources. Appendix H of the document describes the process for designating multi-species WHMAs, like Palen-Ford, in the planning area. The method "adapt[s] a method outlined in Bedward et al. 1992...[taking] into account unsuitable areas, land protection "costs," species/feature protection targets, and existing protected areas." The appendix describes a complex step-by-step process for determining WHMA boundaries that considers more factors than the resources highlighted by the commenter.

The commenter's recommendations have been partially incorporated into the Final EIS. While development of the proposed project solar field site, including the portion of the Palen-Ford WHMA that overlaps the proposed site, does not reduce the WHMA's functionality in the context of the management area as a whole, this functionality is not founded entirely on the presence or absence of the resources described above. The document has been revised to reflect these points.

F001-113 The commenter recommends that the Final EIS should distinguish between the potential glare effects of heliostats (mirrors) and solar PV panels, which have a reflectivity substantially lower than that of window glass, as discussed on Draft EIS page 4.4-21.

The BLM acknowledges the different reflectivity associated with the technologies required to support solar thermal versus photovoltaic power plants. Nonetheless, glare is associated with the proposed technology, and there remains limited data on how wildlife, especially birds, will respond to this effect. The commenter's suggested revisions in addition to additional text provided by the BLM have been adopted in the Final EIS.

F001-114 The commenter recommends revisions to page 4.4-22 that identify effects from Operation and Maintenance (O&M) rather than decommissioning and that omit specification of the construction period for listed effects.

The requested changes have been made in the Final EIS.

F001-115 The commenter expresses concern that the 65 dBA threshold in MM WIL-1, paragraph 9, on Draft EIS page 4.4-26 would limit scheduling construction to the point of project infeasibility. The commenter recommends managing noise according to the wildlife species affected, and makes specific requests for revision to the mitigation measure.

The BLM acknowledges that nesting birds pose a concern with the implementation of project construction. However, as a matter of law, the project owner is required to comply with the provisions of the MBTA and other relevant laws protecting nesting birds. The commenter's suggestion to revise the noise thresholds and develop a nesting bird management plan have been adopted in the Final EIS. No changes have been made to MM WIL-1 item 11 (a) (Avoid Wildlife Pitfalls: Backfill Trenches) as there is adequate flexibility in the existing measure.

F001-116 The commenter expresses concern that the buffer distances surrounding bird nests set forth in MM WIL-1 on Draft EIS page 4.4-31 would limit scheduling construction to the point of project infeasibility. The commenter recommends managing construction disturbance impacts according to the species affected, its tolerance of human activities, its conservation status, and the timing and nature of specific construction activities and makes specific text revision recommendations.

The BLM contends that the existing measure addresses and provides flexibility to allow construction to occur in compliance with State and Federal laws protecting nesting birds. Nonetheless the BLM concurs with the development of a nesting bird management plan to provide a mechanism to protect nesting birds during construction of the proposed project. Portions of the commenter's suggested revisions, in addition to text provided by the BLM, have been adopted in the Final EIS.

F001-117 The commenter does not believe that the project has the potential to “take” or “disturb” golden eagles as those terms are defined by the USFWS, and recommends revisions to MM WIL-5 on Draft EIS page 4.4-35.

The BLM and the guiding documents regarding take of golden eagles consider the large scale loss of foraging habitat to have the potential to constitute take of golden eagles. In addition the request to remove the requirement for winter surveys is not warranted considering the territorial use of the area. However, to provide flexibility in the survey schedule the Final EIS has been revised to accommodate agency discretion on survey schedule and data collection.

F001-118 The commenter recommends specific revisions to the first partial paragraph of page 4.4-37, MM WIL-7, to reflect that neither the Desert Kit Fox nor the American Badger is designated as special status by the USFWS.

The requested changes have been made in the Final EIS.

F001-120 The commenter recommends specific additional text for pages 4.4-48 and 49 to reference the mitigating effects of MM WIL-6, using the first paragraph of page 4.4-22 as a model: "Mitigation Measure MM WIL-6 (Bird and Bat Conservation Plan) would require an evaluation of potential project hazards to birds and bats, and implementation of adaptive management measures as appropriate to address them. This measure is expected to mitigate this potential risk to the extent feasible, but an unknown residual risk to birds may remain, even with implementation of the Bird and Bat Conservation Plan."

The requested changes have been made in the Final EIS.

F001-122 The commenter recommends replacing the language contained in the "Residual Impacts and Unavoidable Adverse Effects" subsection of pages 4.4-51 and 52 with the following: "With the implementation of Mitigation Measures MM VEG1 rough VEG-8 and MM WIL-1 through MM WIL-8, the residual impacts to wildlife resources under Alternative D would be the same as those for Alternative B."

The existing language in the document provides a clear and concise explanation of the effects of the Alternatives. No changes have been made to the Final EIS.

F001-123 The commenter recommends specific revisions in the third full paragraph of page 4.4-52 regarding the location of suitable and occupied habitat for the Mojave Fringe-toed Lizard and Palm Springs Round-Tailed Ground Squirrel.

The requested changes have been made in the Final EIS.

F001-124 The commenter suggests amending the first full paragraph on page 4.4-55 to state that the project site supports habitat for, and in some instances populations of, numerous special-status wildlife species.

The requested changes have been made in the Final EIS.

F001-126 The commenter recommends revisions to page 4.4-57 to ensure that the last paragraph of the page is not misread to state that the USGS Desert Tortoise Habitat Model identifies the project area – as opposed to the Colorado Desert Recovery Unit – as medium to high quality desert tortoise habitat (0.4-0.9).

The requested changes have been made in the Final EIS.

F001-127 The commenter requests that BLM insert language in the "Wildlife Management Areas" paragraph of page 4.4-63 explaining that the contribution of the proposed project to cumulative effects on the Palen-Ford WHMA would not be substantial because, while the proposed project may affect the map depicting the Palen-Ford WHMA boundary, the proposed project does not affect the resources the Palen-Ford WHMA was created to protect.

The commenter's recommendations have been partially incorporated into the Final EIS. See response to Comment F001-112.

F001-128 The commenter recommends revisions to the CEQA cumulative analysis on Draft EIS page 4.4-65 to clarify that while the project construction to reduced wildlife movement connectivity is individually minor, it would make a cumulatively considerable contribution to habitat loss for special-status wildlife species in the NECO planning area, and reduced wildlife movement and connectivity in the upper Chuckwalla Valley. Specific revisions are requested.

The requested changes have been made in the Final EIS.

F001-146 The commenter requests that in the "Habitat Conservation Areas" paragraph of page 4.11-3, BLM cross-reference Section 4.4 and note that the effect on management of the WHMA as a whole is minimal because, while the proposed project may affect the map depicting the Palen-Ford WHMA boundary, the proposed project does not affect the resources the Palen-Ford WHMA was created to protect.

The section of the Final EIS addresses the shape and connectivity of the portion of the Palen-Ford WHMA that overlaps the proposed project. Response to Comment F001-112 addresses the commenter's statements regarding the resources the WHMA was established to protect. The requested reference to Section 4.4 has been included in the Final EIS; no other changes have been made to the document.

F001-166 The commenter believes that Draft EIS statements made on page 4.17-23 about intermountain and foraging habitat loss overstate the effects of the proposed project, which would occupy 0.6 percent of the Chuckwalla Valley identified as low-quality desert tortoise habitat by the 2009 USGS Desert Tortoise Habitat Model.

The Draft EIS provides a description of the potential indirect effects of the Proposed Action as required by NEPA. The placement of perimeter fencing and the solar farm would decrease access for wildlife in the region and would contribute the reduction of movement for wildlife in general. The Draft EIS acknowledges this area is unlikely to function as a critical linkage area; however, the area still provides thousands of acres of relatively intact habitat despite the value identified by the USGS Desert Tortoise Habitat Suitability Model. No changes to the document have been with regard to this comment.

F001-201 The commenter states that Section 4.4.7, Wildlife Habitat (Draft EIS at page 4.4-5) notes that the mitigation measures proposed for the project are expected to effectively mitigate the majority of the project's adverse impacts to wildlife habitat, although some residual impacts would remain; Table 4.24-1, On-site habitat loss, should be revised to better reflect this analysis.

The commenter's recommendations have been incorporated into the Final EIS.

F001-202 The commenter states that Section 4.4.7, Wildlife Movement and Habitat Connectivity [Draft EIS at 4.4-18] notes that mitigation measures for the project would require habitat acquisition in the I-10 corridor and that the habitat at the DHSP project site is modeled as low habitat value, and that much of the local habitat has been disturbed and fragmented and that therefore the DHSP would not substantially alter desert tortoise connectivity; Table 4.24-1, Habitat fragmentation, should be revised to reflect this analysis.

The commenter's recommendations provide more detail than Table 4.24-1, which summarizes unavoidable impacts, is intended to provide. The summary in the table provides an accurate reflection of the unavoidable impacts related to habitat fragmentation. The additional details discussed by the commenter are available in Section 4.4.7, and do not change the conclusion that the project would further fragment local habitat. In summarizing residual impacts, Section 4.4.7 makes a substantially similar statement as the Table 4.24-1, citing "the fragmentation and impaired connectivity of wildlife habitat in the upper Chuckwalla Valley over the life of the Project" as a residual impact. The commenter's recommendations have been partially incorporated into the document.

F001-203 The commenter states that Table 4.24-1, Potential loss of birds during O&M, and Section 4.4.7, Solar Panel Light, Glare, and Collision Risk, (Draft EIS at 4.4-21) note that there is a potential risk of collision with the panels. The commenter requests that BLM revise the discussion on the loss to reflect the potential nature of the impact.

The requested revisions have been made to the Final EIS.

CLIMATE CHANGE

A010-18 EPA recommends including additional requirements in the Final EIS and ROD pertaining to soliciting future contracts for project construction, including use of energy- and fuel efficient fleets, utilization of grid-based or on-site renewable power, use of alternative or zero emissions vehicles, use of energy efficient lighting technology, use of minimum GHG emitting construction materials, use of lighter colored pavement, and recycling construction debris.

It would not be necessary for the Final EIS or ROD to impose additional requirements to minimize GHG emissions. However, the suggestions would be considered by the Applicant, and if found feasible by the Applicant would become Applicant Measures (see Section 4.5.2).

A010-22 EPA states that the Draft EIS does not include a discussion of the potential impacts of climate change on the project. EPA recommends that given the project lifespan, this discussion should be included, particularly regarding groundwater sourcing, post-project restoration, and sensitive species.

The Draft EIS (page 4.5-15) describes the anticipated effects of climate change that have the potential to affect the project, including a decrease in snowpack, sea level rise, more extreme heat days per year, more high ozone days, increased frequency and intensity of wildfires, and more drought years, with impacts on agriculture, water resources, changes in disease vectors, and changes in habitat and biodiversity. The EIS's water resources discussion (Section 4.20) and the Water Supply Assessment (Appendix E1) both take into account water supply under the conditions of multiple years of drought over a 20-year time horizon. This effectively captures the water supply conditions of the project under the most conservative potential local effects of global climate change. Similarly, the effects of the project under the local conditions of climate change are described for biological resources, including desert tortoise, on pages 4.3-63 and 4.4-59.

B006-13 The commenter states that the Draft EIS fails to address risks associated with global climate change in terms of mitigation and adaption strategies. The commenter states that biological resource impacts may run contrary to an effective climate change adaptation strategy, and that impacts at the proposed location could undermine a meaningful climate change adaptation strategy with a poorly executed climate change mitigation strategy. The commenter also notes that project itself will emit greenhouse gases during construction and manufacturing in particular and the Draft EIS contains no discussion of ways to avoid, minimize or off-set these emissions although such mitigation is clearly necessary.

See response to Comment A010-22. Mitigation Measure MM WAT-2 requires adaptive mitigation to changes in groundwater supply caused under multiple years of drought conditions. In addition, as described in the EIS (Draft EIS at 4.5-4) the project would result in avoided GHG emissions associated with displaced fossil fuel power generation, and GHG emissions associated with facility construction and operations would not cause adverse effects. Accordingly, no climate change/GHG emissions mitigation measures are required.

B006-32 The commenter states that as required by NEPA, BLM should quantify and evaluate all direct and indirect GHG and GHG-precursor emissions and impacts associated with construction, electricity use, fossil fuel use, water consumption, waste disposal, transportation, the manufacture of building materials (lifecycle analysis), and land conversion, and consider the destruction of carbon sinks in desert soils. The commenter states that the EIS does not discuss reducing construction GHG emissions through use of more efficient vehicles, and fails to consider any alternatives to reduce GHG emissions in the near-term, regardless of long-term reductions, thus violating NEPA. The commenter states that mitigation measures for PM10 emissions are not specific and enforceable because the extent of the impact has not been adequately addressed initially.

The comment notes that NEPA requires consideration of GHG emissions, notably indirect emissions (including manufacture and lifecycle emissions) and the potential for land conversion to reduce the value of carbon sinks (i.e., changing the ecosystem storage potential of the site. The comment notes that GHG emissions attributable to fossil fuel use and other resource use (water or solid waste disposal) during manufacturing emissions would be far-reaching, and BLM agrees. These emissions could vary widely depending on the local conditions at the point of manufacture, which is likely to be far removed from the project site and beyond the control of the action contemplated by BLM. Nothing in NEPA requires quantification of a specific project's lifecycle emissions. For this case, the project's production of renewable electricity would displace its lifecycle GHG emissions. The Draft EIS (Chapter 3.5, Affected Environment, Climate Change) describes the limited existing storage potential of the setting and the limited potential of the project to affect carbon sinks. The comment also notes that wind erosion and equipment use would affect air quality, but the comment does not offer ways to improve the enforceability of the mitigation.

B008-10 The commenter states that new transmission facilities and upgrades may increase emissions of SF6, a highly potent GHG. The commenter requests a more detailed and quantitative analysis of SF6 emissions related to the project. Additionally, the commenter requests analysis of GHG emissions associated with a commuting labor force over the life of the project and with removal plants, soils, and biotic features that store carbon.

The comment notes that GHG emissions attributable to fossil fuel use associated with construction and maintenance would be far-reaching, and BLM agrees. These emissions could vary widely depending on the local conditions at the point of manufacture, which is likely to be far removed from the project site and beyond the control of the action contemplated by BLM. Nothing in NEPA requires quantification of a specific project's lifecycle emissions. For this case, the project's production of renewable electricity would displace its lifecycle GHG emissions. The Draft EIS (Chapter 3.5, Affected Environment, Climate Change) describes the limited existing storage potential of the setting and the limited potential of the project to affect carbon sinks.

B009-13 The commenter notes that the Draft EIS evaluates the GHG emissions from the project, but recommends that the EIS evaluate the impacts of climate change on the project, and how the project's effects would combine with the anticipated effects of climate change.

Local effects of climate change are not and cannot be known in detail. Nonetheless, the Draft EIS evaluates the effects of the project in combination with the anticipated effects of climate change on species and habitats. Draft EIS page 4.3-63 states that climate change is expected to exacerbate the effects of drought and noxious weed spread and evaluates the effects of the project within this context. Similarly, page 4.4-59 evaluates the effects of the project on desert tortoise in the context of how climate change is expected to affect desert tortoise habitat. No changes to the EIS are warranted as a result of this comment.

CONSULTATION, COORDINATION, AND PUBLIC PARTICIPATION

A007-1 The commenter notes that there are two conflicting due dates for Draft EIS comments on the BLM's website.

Comments on the Draft EIS were received through July 18, 2012 by the BLM. All comments received were accepted, and responses to each comment are included herein.

A010-25 EPA states that it has identified and notified 9 additional tribes that are not geographically near the project, but have historically lived in the area. EPA recommends BLM contact these additional tribes to ensure they have been provided the opportunity to participate in the ongoing government-to-government consultation for the project.

BLM has contacted the recommended tribes.

B001-1 The commenter states that the public meetings for DHSP are described as "workshops," but that BLM should comply with its instructional memo guiding public hearings. The commenter states that meetings should allow public testimony with a court reporter to take transcripts, and that allowing only group discussion is disrespectful to the public.

BLM agrees with the commenter regarding the importance of soliciting public opinion at meetings, which the BLM terms "workshops." All BLM public meetings for the DHSP have provided the opportunity for both written comments and oral comments, with a court reporter present to transcribe oral comments. Meetings have also been staffed by BLM and Applicant representatives to answer additional informal questions, provide specific project details, and give the public adequate background to comment on the Draft EIS. A full description of the public participation process can be found in Chapter 5: Consultation, Coordination, and Public Participation.

B002-1 The commenter states that the BLM should accept public comments at the DHSP public meetings, citing previous public meetings for solar projects in which only the Applicant was permitted to speak. The commenter states that allowing only written comments is potentially negligent toward people with disabilities or those who are not interested in submitting written comments; allowing only the Applicant to speak shows favoritism to the Applicant, and potentially represents discrimination.

See response to Comment B001-1.

B011-15 The commenter states that the project site is near several significant Chemehuevi and Fort Mojave resources, but that there has been insufficient consultation with Native American tribes. The commenter also states that the project will restrict access to religious and culturally-significant sites in violation of the Religious Freedom Restoration Act. The commenter further states that the EIS does not adequately address the project's impacts on Native American sacred sites and culturally significant sites and artifacts.

An indirect effects report was prepared for the Final EIS, and the cultural resources section has been updated for the Final EIS. The resources described by the commenter have not been identified in the report.

C001-1 The commenter states that the Cabazon Band of Mission Indians remains an interested party in the DHSP, and appreciates the offer to consult on a Government-to-Government basis in the future. The commenter states an interest in continued collaboration in the preservation of cultural resources and areas of traditional cultural importance.

BLM is engaged in ongoing consultation with Native American groups, as described in Chapter 5, to ensure complete consideration of cultural resources.

D001-5 The commenter states that as a landowner and developer in the Desert Center area, the level of community outreach conducted by the Applicant has been appreciated.

The BLM is engaged in ongoing consultation with the public, as described in Chapter 5.

CULTURAL RESOURCES

A004-41 The commenter agrees that the project area should have a complete Class III inventory to identifiy cultural resources and requests that a copy of the reports be made available to the NPS. The commenter is concerned about completion of a full inventory and recordation of cultural reources and determinations of eligibility for the National Register of Historic Place be made for the Final EIS. Of particular interest to Joshua Tree National Park is: 1. prehistoric and historic transportation corridors that might lead into the park; 2. information on prehistoric lithic quarries; 3. information on rock art; 4. habitation sites with midden deposits; 5. early Holocene Pinto sites; Patton WWII Desert Training Center sites within the Park; and, 7. California Aqueduct related sites.

Some of the noted resources were identified either in the area of potential effects (APE) for direct effects or the APE for indirect effects. These include a prehistoric transportation corridor (Coco-Maricopa Trail CA-Riv-0053T), a prehistoric lithic quarry (North Chuckwalla Mountains Quarry District), a prehistoric rock art site (North Chuckwalla Mountains Petroglyph District), some prehistoric sites which may date to the early Holocene (6000 BC to AD 500), some WWII era sites, and three built environment resources associated with the Colorado River Aqueduct.

A004-42 The commenter states that no studies regarding prehistoric or historic cultural landscapes have been done in the eastern half of the Park and the impact of the project on the viewshed or other indirect impacts therefore cannot be assessed, but is of concern to the Park. The commenter further states that no studies regarding traditional cultural properties have been done in the Park, and the impact of this project on the viewshed or other indirect impacts therefore cannot be assessed, but are of concern to the Park.

The area of potential effect (APE) for indirect effects was defined as the area within 5 miles of the proposed project and alternatives, which includes a portion of the Park. Indirect adverse effects associated with the proposed project were identified for the North Chuckwalla Mountains Petroglyph District and for Patton's World War II Desert Training Center California-Arizona Maneuver Area (DTC/C-AMA) historic district. However, none of the affected resources are located within the Park.

A010-24 EPA states that the Draft EIS describes cultural resources impacts and subsequent mitigation as unknown due to incomplete identification efforts. EPA recommends that the Final EIS describe the process and outcome of government to government consultation, discuss issues raised by this consultation and how they are addressed, describe how impacts to tribal or cultural resources will be avoided or mitigated, include NRHP eligibility determinations and the results of indirect effects studies, and update the analysis and cumulatives sections to reflect tribal concerns.

BLM is engaged in ongoing consultation with Native American groups. The details of this process are described in Chapter 5. The Final EIS includes detailed analysis of impacts to cultural resources and provides mitigation measures to reduce these impacts to the greatest extent feasible.

C002-1 The Augustine Band of Cahuilla Indians (Tribe) states support for increasing the development of renewable energy resources through appropriately sited large-scale projects that avoid impacts to Native American cultural resources; appropriate siting is of paramount importance, and none of the federal mandates supporting solar power have waived environmental protection. The Tribe states that it is critical that renewable energy objectives be attained in an environmentally responsible manner.

BLM is engaged in ongoing consultation with Native American groups, as described in Chapter 5, to ensure complete consideration of cultural resources. The Final EIS includes detailed analysis of impacts to cultural resources and provides mitigation measures to reduce these impacts to the greatest extent feasible. BLM concurs that renewable energy objectives must be attained in an environmentally responsible manner, and has drafted the Final EIS in compliance with relevant federal regulations pertaining to cultural resources, including the National Historic Preservation Act.

C002-2 The Tribe states that the DHSP Draft EIS may have been released prematurely, as the full extent of potential impacts to Native American cultural resources has not been fully researched, evaluated, and documented.

The Final EIS provides additional information regarding cultural and archaeological resources to fully examine, evaluate, and document potential impacts. Please refer to Sections 3.6 and 4.6 of the Final EIS.

C002-3 The Tribe states that the Draft EIS contains many incomplete studies regarding cultural resources, properties, and that tribal consultation has not been satisfactorily completed. The Tribe states that BLM has proceeded with the publication of the Draft EIS in spite of these incomplete considerations, and in spite of similar concerns at the neighboring Desert Sunlight Solar Farm; given this, the Draft EIS does not provide a full and fair discussion of significant impacts to cultural resourves and is not a useful tool in informing decision makers and the public of the appropriate actions that should be taken to protect these resources or reasonable alternatives to avoid or minimize impacts.

The Final EIS provides additional studies and surveys regarding cultural resources to fully examine, evaluate, and document potential impacts. Please see response to comment C002-2.

C002-4 The Tribe states that additional studies, including an ethnographic study and a cultural landscape study, were repeatedly requested to be conducted early in the project and should have been included in the Draft EIS to more fully understand the significance of Native American cultural resources that exist within the project site and the region as a whole. The Tribe states that different conclusions regarding cultural resources on the project site may have been reached had these studies been conducted, and that these results may have changed conclusions about project feasibility, mitigation measures, and impact significance.

The Final EIS provides additional studies and surveys regarding cultural resources to fully examine, evaluate, and document potential impacts. This includes a supplemental literature review compiled by Earle and Associates entitled "Ethnographic and Ethnohistoric Information on Chuckwalla Valley and Vicinity." Please refer to Sections 3.6 and 4.6 of the Final EIS.

C002-5 The Tribe states that MM CUL-1 provides for the future preparation of a cultural resources Monitoring and Treatment Plan. The Tribe asks why this study was not completed prior to the issuance of the Draft EIS, and how impacts and reductions can be assessed prior to completion of this study.

Mitigation Measure MM CUL-2 requires the development and submission of a cultural resources Monitoring and Treatment Plan prior to receiving a BLM Notice to Proceed. This Plan would incorporate the details of the mitigation measures outlined in the Final EIS as well as the conditions in the final MOA. Therefore the Plan cannot be completed until the MOA has been finalized. The Plan would incorporate all of the cultural resource mitigation measures (MM CUL-1 through CUL-9) and must comply with BLM and Riverside County regulatory requirements.

C002-6 The Tribe states that a lack of surface evidence does not preclude subsurface existence of archaeological resources and that subsurface testing is necessary to fully determine potential impacts. The Tribe states that postponing subsurface investigations until after construction has begun may result in permanent damage or destruction of cultural resources during construction.

Mitigation Measure MM CUL-9 (Pre-construction Geoarchaeological Subsurface Excavation) requires a geoarchaeological study prior to construction. The results of this study will be used to refine the Monitoring and Treatment Plan so as to better avoid inadvertent damage of cultural resources during construction.

C002-7 The Tribe states that according to 40 CFR 1502.25, the Draft EIS must "to the fullest extent possible" integrate all "surveys and studies" necessary to avoid destruction of and impacts to valuable resources. The Tribe states that presenting the Draft EIS prior to completion of important surveys and studies is counter to the basic disclosure purposes of the Draft EIS, and makes complete identification of the affected environments, adverse impacts, and mitigation impossible.

The Final EIS provides additional studies and surveys regarding cultural resources to fully examine, evaluate, and document potential impacts. Please see response to comment C002-2.

C002-8 The Tribe states that the cumulative analysis is flawed because it estimates the number of cultural resources that will be significant and that will be destroyed by extrapolating from previous projects. The Tribe states the cumulative analysis should instead focus on the "big picture" by viewing each cultural resource as a piece of a larger regional puzzle and considering the overall significance at the regional scale, rather than at the project scale. The Tribe states that because of the flawed cumulative analysis, the conclusion that impacts would be small is also flawed, and that a regional approach to cultural resources is necessary to determine impacts and significance.

The Final EIS addresses the cumulative impact of projects in the Desert Center area using the best data available given the scope of the project. The programmatic level of analysis suggested is beyond the scope of this project-level EIS.

C002-9 The Tribe states that the Draft EIS does not adequately examine the cumulative impact to cultural resources of the numerous proposed and approved projects in the area, and the relationship of these impacts to the proposed project. The Tribe states that a more detailed, regional-scale examination of cumulative impacts of all proposed and approved projects is needed to adequately address cumulative impacts.

Please see response to comment C002-8.

C003-1 The commenter, the Colorado Indian Tribes or CRIT, states that the project will have significant impacts on CRIT's culture, history, and traditions, and that the Draft EIS does not disclose these impacts because surveys have not been conducted. The commenter further states that the Draft EIS defers development of mitigation measures until after project approval, in violation of NEPA, NHPA, and CEQA. The commenter recommends that the Draft EIS be recirculated for public review on these grounds.

The Final EIS provides additional studies and surveys regarding cultural resources to fully examine, evaluate, and document potential impacts. Please see response to comment C002-2. BLM Class III cultural resource inventories of about 96% of the DHSP APE have been completed. Portions of Alternative D and Alternative E that are located on privately owned land have not yet been surveyed due to site access restrictions (105.3 acres). Site access restrictions are an allowable reason to forego Class III surveys under both NEPA and CEQA. In addition, the public is being provided an opportunity to review the results of these surveys and provide comments on the findings during the 30-day public circulation period provided for a Final EIS under NEPA. In addition, mitigation measures have been added and clarified. Mitigation measures are not inappropriately deferred.

In addition, BLM's responsibilities under Section 106 of the National Historic Preservaton Act will be satisfied when a binding commitment to the mitigation measures proposed in the Final EIS is incoropated into the ROD or an MOA is drafted (36 CFR 800.8 (4)).

C003-2 CRIT states that the BLM has not completed surveys for the EIS, resulting in inappropriate deferral of mitigation, stating that the Draft EIS mist include information about the degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the NRHP or may cause loss or destruction of significant scientific, cultural, or historical resources. The commenter further states that the Draft EIS does not offer any explanation for why BLM or Riverside County did not complete surveys prior to the release of the Draft EIS.

The Final EIS provides additional studies and surveys regarding cultural resources to fully examine, evaluate, and document potential impacts. In addition, mitigation measures have been added and clarified. Mitigation measures are not inappropriately deferred. Please see response to comment C002-2.

C003-3 CRIT claims that the Draft EIS focuses almost entirely on cultural resources that are archeological in nature, and underemphasizes traditional cultural properties (e.g., Salt Songs of the Chemehuevi). The commenter recommends consultation with Tribes.

BLM is engaged in ongoing consultation with Native American groups. The details of this process and a summary of the comments received are described in Chapter 5 of the Final EIS.

C003-4 CRIT states that the Draft EIS improperly defers development of mitigation for cultural resources impacts as a result of not completing surveys by the time the Draft EIS was released. The commenter states that the NHPA and the proposed Monitoring and Treatment Plan contemplate avoidance of resources, but notes that avoidance is not possible if survey and analysis is not performed prior to project approval, citing the Genesis Solar Energy Project as an example. The commenter states that deferral of mitigation is strictly prohibited under CEQA, citing case law, and noting that under CEQA, the significance of impacts is not disclosed.

Please see response to comment C003-1.

C003-5 CRIT states that the Draft EIS fails to include information regarding BLM's ongoing obligation to consult with the Tribes. The commenter requests that BLM provide CRIT with specific procedures that the agency will follow to fulfill its ongoing obligation to consult. CRIT requests to be included in surveys of the area that are conducted during the process to gather information or prepare the MOA and HPTP.

BLM is engaged in ongoing consultation with Native American groups. The details of this process are described in Chapter 5.

C003-6 The commenter notes that the Draft EIS bases its cumulative effects analysis on the assumtion that any project in the area will unearth on average 0.019 cultural resources per acre and 0.002 potentially eligible resources per acre; however, the commenter states that this methology is flawed, particularly given the example of the Devers-Palo Verde transmission project, where human remains were discovered. The commenter notes that disturbance of these remains is a significant impact to CRIT's member tribes. The commenter provides another example, the Genesis Solar Energy Project, where hundreds of cultural resources have been uncovered in a 100-acre area, far exceeding the average density calculation. The commenter requests that BLM reevaluate the cumulative effects of the project to consider the fact that projects in the area will continue to unearth, damage, and destroy concentrated areas of cultural resources.

The Final EIS addresses the cumulative impact of projects in the Desert Center area using the best data available given the scope of the project. The emphasis on quantitative data (average cultural resources per acre) is based on the NEPA requirement to use quantititative data when available. Cumulative analyses are useful tools for describing regional trends, but are not the appropriate methods for predicting the presence of buried resources in specific locations such as those identified during construction of Devers to Palo Verde 2 and the Genesis Solar Energy Project.

C003-7 The commenter states that the Draft EIS does not discuss the impact to plants as a cultural resource impact, particularly with respect to creosote brush scrub's medicial and aesthetic values.

An ethnographic literature review carried out for the Final EIS did not identify creosote as an individually important plant. Please see Sections 3.6 and 4.6 for further discussion of the findings of the ethnographic literature review.

D001-1 The commenter states that the I-10 corridor surrounding the DHSP site is "the most sacred place there is" and that the Chemehuevi tribe opposes the siting of the DHSP and other power plants in the area for making a mockery out of U.S. citizens and indigenous Uto-Aztecan people, who relate the sites to the Aztec calendar.

BLM is engaged in ongoing consultation with Native American groups. The details of this process are described in Chapter 5. Although indirect impacts to cultural resources have been identified, Mitigation Measures MM CUL-1 through CUL-9 and the additional measures developed in the MOA will reduce project-related impacts to cultural resources. Please see Section 4.6 for further detail regarding the mitigaiton measures. A draft MOA is included as Appendix O.

D001-2 The commenter describes the geography of the project area and surrounding areas in terms of their significance to the indigenous people of the area, including being important as the basis of the Aztec Calendar. The commenter cites the MOU between the tribe and the BLM, and states that the tribe has previously informed BLM of the significance of these sites.

The BLM is engaged in ongoing consultation with Native American groups and other interested parties, described in Chapter 5, to ensure that cultural resources are appropriately considered and impacts mitigated to the fullest extent possible.

D001-3 The commenter states that another project broke ground in Blythe after touring only part of the Aztec Calendar area.

While projects in the Blythe vicinity are included in the cumulative analysis, a detailed discussion of the impacts associated with other projects is beyond the scope of this document.

F001-4 The commenter states that Tables ES-1, CR-1, and CR-2 be revised to reflect the NRHP status of each resource and include only those that are NRHP-eligible or unevaluated in the analysis of project effects. The commenter further requests clarification on whether mitigation measures MM CUL-8 and CUL-9 are included or have been eliminated.

The Final EIS provides revised tables which provide standard cultural resources information regarding the presence of resources within the APE and their eligiblity status. In addition, two new mitigation measures have been added, making a total of nine.

F001-57 The commenter states that language in Section 3.6, Cultural Resources, of the Draft EIS suggests that large portions of the project had not been investigated and that, after circulation of the Draft EIS, the potential to discover significant historic properties that would be affected adversely was high. The commenter states that at the time of the Draft EIS circulation, only small portions of the gen-tie alternative corridors remained to be surveyed because of denied access. The commenter states that the Draft EIS also overstates the likelihood of finding significant cultural resources during subsequent surveys, as previous surveys did not discover significant resources eligible for the National Register of Historic Places (NRHP), and that geomorphological research suggests the area may not be universally sensitive for undiscovered resources as stated in the Draft EIS. The commenter recommends revisions to this section to incorporate data in two BLM reports from June 2012 that have confirmed the paucity of archaeological resources and the limited potential for their discovery within the project area.

The Final EIS incorporates the results of all additional studies and surveys that have been required by BLM for the completion of the document. Please refer to Sections 3.6 nd 4.6 of this Final EIS.

F001-58 The commenter requests that information be added to Section 3.6, Cultural Resources, indicating that the BLM has initiated Section 106 consultation with Native Americans regarding potential effects of the project on historic properties, and that progress and results of that consultation should be incorporated into this chapter.

The section has been revised to direct readers to Chapter 5 for additional information.

F001-59 The commenter states that on Draft EIS pg. 3.6-2, Section 3.6.1, the paragraph discussing requirements of treatment of human remains under the NAGPRA does not clearly state that no human remains have been discovered in the project area and that no prehistoric sites of the type that would contain human remains have been identified.

The requested information is presented in Section 3.6.2 of the Final EIS (under the heading "Resources Identified within DHSP Components and in the Vicinity").

F001-60 The commenter states that on pg. 3.6-4, Section 3.6.1, it should be noted that under provisions of Public Resources Code Section 5097.98 only one Most Likely Descendant (MLD) would be identified by the Native American Heritage Commission, and that it should be stated there has been no discovery of human remains in the Project area.

Public Resources Code Section 5097.98 states that the Native American Heritage Commission "shall immediately notify those persons it believes to be most likely descended from the deceased Native American." The requested information related to human remains in the APE is presented in Section 3.6.2 of the Final EIS.

F001-61 The commenter states that Section 3.6.2, Cultural Resources: Existing Conditions (Draft EIS pg. 3.6-6), should be updated to reflect the geomorphology study carried out specifically for the DHSP and reported in a BLM Class III Archaeological Resources Inventory (Chambers Group and Applied EarthWorks 2012). The Applicant states that this study is in contradiction to the Draft EIS' statement that it is likely that significant archaeological deposits are buried in the project area. The commenter cites additional evidence in opposition to the statement in the Draft EIS.

The Final EIS incorporates the results of the above mentioned geomorphology study. Mitigation Measure MM CUL-9 (Pre-construction Geoarchaeological Subsurface Excavation), responding to the moderate sensitivity identified by this study, requires geoarchaeological field work prior to construction. The results will be used to refine the Monitoring and Treatment Plan so as to better avoid inadvertent damage of cultural resources during construction.

F001-62 The commenter states that Section 3.6.2, Cultural Resources: Existing Conditions (pg. 3.6-28) should include more detail regarding the types and age of the 352 cultural resources that are reported within a mile of the project site. The Applicant states that the majority of these are from the historic era and the vast majority are isolated artifacts, not archaeological sites. Isolated artifacts rarely qualify for management consideration under Section 106 because of a lack of context and no significant data potential.

The requested details are part of the cultural resources technical reports for this project. The technical reports are a part of the administrative record, and can be veiwed at the Palm Springs-South Coast Field office.

F001-63 The commenter states that Section 3.6.2, pg. 3.6-28, provides little detail of the types and age of the 352 cultural resources that are reported. The commenter states that the majority of these are from the historic era and the vast majority are isolated artifacts, not archaeological sites; isolated artifacts rarely qualify for management consideration under Section 106 because of a lack of context and no significant data potential.

Please see response to comment F001-62.

F001-64 The commenter requests that BLM add a statement to Section 3.6.2, Cultural Resources: Existing Conditions (pg. 3.6-29) that archaeological sites themselves found not eligible for the NRHP do not qualify for further management consideration under Section 106. The commenter adds that the North Chuckwalla Mountains Quarry District is listed on the NRHP, under Criterion D for its research value, but that research values are not NRHP qualities that are subject to indirect visual, auditory, or atmospheric effects; therefore, the DHSP would have no adverse effect to that resource.

The requested revision regarding site eligibility is presented in Section 3.6.2 of the Final EIS. In the case of the North Chuckwalla Mountains Quarry District, BLM did not identify an adverse effect to this resource as a result of the proposed project or alternatives.

F001-65 The commenter states that in Section 3.6.2, Cultural Resources: Existing Conditions (pg. 3.6-29), while the Draft EIS notes that all project components are within the boundaries of two potential historic districts currently being studied, neither historic district has been found eligible for the NRHP, and thus they have no legal standing. The commenter states that these sites must be evaluated in the context of an earlier evaluation of a discontiguous district (Bischoff 2000) and must be evaluated individually, not as contributing elements of a proposed district.

The Final EIS identifies the Desert Training Center California-Arizona Maneuver Area (DTC/C-AMA) as a historic district eligible for the NRHP. Supporting documentation in the administrative record (Kalish 2012) identifies this resource as eligible under Criteria A, B, C, and D. Although the Final EIS mentions the Prehistoric Trails Network Cultural Landscape as a prehistoric district currently under evaluation by the California Energy Commission, no resources with the project APE are identified as contributors to this district.

F001-66 The commenter states that Section 3.6.2, Cultural Resources: Existing Conditions (pg. 3.6-29), should be updated to indicate that none of the archaeological resources in the 1208-acre solar farm, including the “pot drop,” appear to be eligible for the NRHP. The commenter recommends that BLM state that the entire solar farm has been surveyed intensively.

The Final EIS has been revised to include the requested changes.

F001-67 The commenter (the project Applicant) states that in Section 3.6.2, Cultural Resources: Existing Conditions (pg. 3.6-30), the summary of the number of sites and their NRHP eligibility in this section and Table 3.6-1 should be updated using revised data from the Class III archaeological inventory report (Chambers Group and Applied EarthWorks 2012). The Applicant states that because of previous inaccuracies in mapping and analysis, the Draft EIS overstates the number of cultural resources within each alternative corridor and the portion of each alternative that has been intensively surveyed. The Applicant notes that Alternative B/C includes only 18 archaeological sites, with only determined to be eligible for the NRHP under surveys for the Desert Sunlight Project.

The Final EIS incorporates the results of all additional studies and surveys that have been required by BLM for the completion of the document. Please refer to Sections 3.6 and 4.6 of this Final EIS.

F001-68 The commenter states that in Section 3.6.2, Cultural Resources: Existing Conditions (pg. 3.6-30), only eight archaeological sites, including one determined to be eligible for the NRHP, occur in the Alternative D area, and only 98.3 acres of the area have not been surveyed due to private acess constraints.

The Final EIS incorporates the results of all additional studies and surveys that have been required by BLM for the completion of the document.

F001-69 The commenter states that in Section 3.6.2, Cultural Resources: Existing Conditions (pg. 3.6-30), only seven archaeological sites, with none determined to be eligible for the NRHP, occur in the Alternative E area, with the whole area having been surveyed.

The Final EIS incorporates the results of all additional studies and surveys that have been required by BLM for the completion of the document.

F001-70 The commenter states that in Table 3.6-1 (pg. 3.6-30), the location of the final two entries should be clarified because they are not within the area of direct effects and the Red Bluff Substation is not being evaluated in this Draft EIS.

These two resources in the vicinity of the Red Bluff Substation are with the indirect effects APE which has been defined as the area within 5 miles of the proposed project and alternatives.

F001-131 The commenter states that in paragraph three of pg. 4.6-1, the five steps should be revised to indicate that inventory provides a list of potential historic properties and that a resource achieves "historic property" status only if it is found to be eligible for the NRHP. The commenter also requests that BLM revise the paragraph to indicate that only adverse effects to historic properties must be resolved.

The requested changes have been made in the Final EIS.

F001-132 The commenter states that in Section 4.6.1, Archaeological Resources Inventory (pg. 4.6-2), the status of the archaeological surveys should be revised to show that only 98.3 acres of Alternative D Gen-tie (4 percent of the project and alternative gen-ties) have not been subjected to intensive survey because of denial of access by private landowners.

The Final EIS incorporates the results of all additional studies and surveys that have been required by BLM for the completion of the document. Please refer to Sections 3.6 and 4.6 of this Final EIS.

F001-133 The commenter states that in Section 4.6.2, Applicant Measures (pg. 4.6-3), although only one Applicant Measure has been proposed for cultural resources, it should be characterized as a comprehensive plan that will ensure resolution of any adverse effects and discovery and proper treatment of historic properties during project development, operation, and decommissioning, in accordance with all existing laws and regulations, and in consultation with regulatory agencies and all interested parties.

BLM adopted the Applicant Measure by incorporating it into project-specific mitigation measures, as appropriate, to minimize adverse effects to the extent feasible.

F001-134 The commenter recommends that section 4.6.6 (Draft EIS pg. 4.6-4) and all subsequent sections be reviewd to indicate that no NRHP-eligible properties have been identified within the solar facility site during intensive surveys of 100 percent of the APE.

The requested changes have been made in the Final EIS.

F001-135 The commenter states that in Section 4.6.6, Alternative 4 (Proposed Solar Project) (Draft EIS pg. 4.6-5), the statement regarding potential for buried archaeological sites within the solar farm should be revised to indicate that sediments within the project vary widely in their potential for having been used for prehistoric activities and then for burying artifacts and features in a manner that their context and integrity would be retained.

The Final EIS incorporates the results of a geomorphology study completed specifically for DHSP. Mitigation Measure MM CUL-9 (Pre-construction Geoarchaeological Subsurface Excavation), responding to the moderate sensitivity identified by this study, requires geoarchaeological field work prior to construction. The results will be used to refine the Monitoring and Treatment Plan so as to better avoid inadvertent damage of cultural resources during construction.

F001-136 The commenter requests that statements regarding the impacts of construction on Draft EIS pg. 4.6-5 be revied, as there will be no direct effects to any built environment resources and proposed historic landscapes have no standing until such time as one or both are determined eligible for the NRHP. Specific revisions are recommended.

BLM has not identified direct effects to any built environment resources. However, adverse indirect effects have been identified for the Desert Training Center California-Arizona Maneuver Area (DTC/C-AMA), a historic district which BLM has determined eligible for the NRHP (Kalish 2012).

F001-137 The commenter states that in MM CUL-4 (pg. 4.6-9), the third sentence should be revised to require WEAP training for cultural resources, not paleontology.

The requested changes have been made to the document.

F001-138 The commenter states that MM CUL-5 on pg. 4.6-9 should be revised to clarify that the Monitoring and Treatment Plan (MM CUL-2) plan would factor in geomorphological conditions across the project and would require monitoring in areas of high potential for significant and intact buried cultural deposits.

The Final EIS has been revised to include a new mitigation measure, MM CUL-9 (Pre-construction Geoarchaeological Subsurface Excavation), which requires geoarchaeological field work prior to construction. The results of this study will be used to refine the Monitoring and Treatment Plan so as to better avoid inadvertent damage of cultural resources during construction.

F001-139 The commenter requests that analysis in Draft EIS pg. 4.6-13 and subsequent gen-tie analyses acknowledge the real potential for avoiding and protecting historic properties even if they are within the APE, as widely spaced transmission poles can often be designed and constructed to avoid direct impacts to identified resources.

Mitigation measures developed to address adverse effects to specific resources will be presented in the draft MOA, which is in Appendix O of this Final EIS.

F001-140 The commenter requests revision of Draft EIS pg. 4.6-26 to reflect the current inventory of nistoric properties that would actually be affected by the project, and states tthat the solar facility would not have direct impacts, and Gen-Tie Alternatives B and C would have the greatest potential for direct effects on historic properties. The commenter suggests that through project design, impacts to all but the single known NRHP-eligible site could likely be avoided.

The requested changes, in the form of Table 4.6-1, have been made in the Final EIS.

F001-141 The commenter states that in section 4.6.16, CEQA Considerations for Alternative 4 (pg. 4.6-28), MM CUL-8 and CUL-9 are introduced for the first time and are presumed to have been eliminated. The commenter states that none of the other Mitigation Measures discusses an MOA or HPTP, but perhaps should, given that typically if a project is determined under Section 106 to have an adverse effect on historic properties, the resolution of adverse effects is memorialized in an MOA document and treatments are detailed in an HPTP. The commenter states that if the BLM anticipates a Finding of Adverse Effect for the project, reference to the agreement and treatment documents should be made within MM CUL-2.

The Final EIS has been revised to include two new mitigation measures, for a total of nine. In addition, the need for an MOA is discussed in Section 3.6.1. The draft MOA is provided in Appendix O of this Final EIS.

F001-204 The commenter requests that BLM conform the description of cultural resources mitigation measures in the "Cultural" row of Table 4.24-2 with the mitigation measures of Section 4.6 of the DEIS. The requested changes have been made in the Final EIS.

CUMULATIVE SCENARIO AND CUMULATIVE EFFECTS

A008-24 The commenter states that there is insufficient information to consider what projects/activities are reasonably foreseeable (for cumulative analysis) over the more than 30 years spanned by project construction, operations, and decommissioning. The commenter requests additional discussion of the potential projects during the more than 30 years (not only those with existing BLM and California Energy Commission [CEC] applications). The commenter also requests a discussion of where development may be precluded. [page 4.3-56]

Please see Section 4.1.4 for a full explanation of the cumulative scenario used in the EIS analysis. The inclusion of projects that do not have existing BLM and CEC applications would be speculative and beyond the scope of NEPA.

A008-25 The commenter requests the inclusion of the Eagle Mountain Pumped Storage Hydroelectric project in Table 4.3-5 (Cumulative Projects within the Geographic Scope of Cumulative Analysis) on page 4.3-57 of the Draft EIS.

The Eagle Mountain Pumped Storage Project was included in Table 4.1-2 (Foreseeable Projects along the I-10 Corridor – Eastern Riverside County) in the Draft EIS. Table 4.3-5 notes that all projects within the NECO planning area listed in Table 4.1-1 and Table 4.1-2 are considered cumulative projects for impacts on vegetation. Table 4.3-5 only lists the projects closest to the DHSP site. No changes have been made to the Final EIS in response to this comment.

A008-60 The commenter states that there is insufficient information to consider what projects/activities are reasonably foreseeable (for cumulative analysis) over the more than 30 years spanned by project construction, operations, and decommissioning. The commenter requests additional discussion of the potential projects during the more than 30 years (not only those with existing BLM and CEC applications). The commenter also requests a discussion of where development may be precluded. The commenter requests the inclusion of the Eagle Mountain Pumped Storage Hydroelectric project in Table 4.4-3 (Cumulative Projects within the Geographic Scope of Cumulative Analysis) of the Draft EIS.

Please see response to Comment A008-25.

A012-12 The commenter states that BLM should include the Solar Energy Development Programmatic EIS and Desert Renewable Energy Conservation Plan (DRECP) in the cumulative effects analysis.

The Riverside East SEZ as described in the Solar Energy Development Programmatic EIS was considered in the discussion of cumulative impacts in Sections 4.3.16 and 4.4.16. With regard to the Final Solar Programmatic EIS (PEIS) and the DRECP, see responses to Comments A010-1 and B005-3.

A012-13 The commenter states that BLM should include the Eagle Mountain Pumped Storage Hydroelectric project in the analysis of cumulative effects.

Please see response to Comment A008-25.

B005-3 The commenter states that the cumulative effects analysis must be expanded to include the Glorious Land Company's proposed Paradise Valley Development and the Riverside East SEZ.

The cumulative effects analysis for groundwater resources appropriately considered only those projects that would affect the Chuckwalla Valley Groundwater Basin, within which the DHSP is situated. The Paradise Valley project is outside of this groundwater basin. In addition, according to the notice of preparation of an Environmental Impact Report for the Paradise Valley Project (Riverside County 2005), the local aquifer will be recharged through water transfer agreements under the management of Coachella Valley Water District (CVWD). With the agreement already under contract, the project will utilize imported groundwater purchased from Rosedale-Rio Bravo Water Storage District (RRBWSD). The re-charge water will be supplied by the Metropolitan Water District of Southern California's Colorado River Aqueduct (CRA), which passes through the property. The underground alluvial aquifer system will be augmented by this source on an equal exchange basis. The project will also utilize tertiary treated wastewater as recycled water for irrigation of golf courses, parks and other landscaped areas. Therefore, the Paradise Valley project is outside of the cumulative geographic scope of groundwater analysis for the DHSP and would not contribute to cumulative groundwater effects.

The project is within the cumulative geographic scope for cultural resources, paleontological resources, fire and fuels management, public health and safety, social and economics, and solid and hazardous wastes, as described in Table 4.1-3 on pages 4.1-16 through 4.1-22 of the Draft EIS. The Paradise Valley project is considered in combination with the DHSP and other regional projects in the cumulative effects analysis in the EIS.

The Final PEIS for Solar Development in the West had not been released as of the date of publication of the DHSP Draft EIS. The Final PEIS was published on July 27, 2012 and the final boundaries of the Riverside East SEZ and its anticipated percentage development has been updated in the Final EIS (see Figure 1-3 in Appendix A)

B005-4 The commenter states that Solar PEIS should be evaluated in the cumulative analysis for the DHSP EIS.

See response to Comment B005-3.

B006-33 The commenter cites case law to support the claim that the Draft EIS does not meaningfully analyze the cumulative impacts from the many identified proposed projects. The commenter states that because the initial identification and analysis of impacts is unfinished, the cumulative impacts analysis cannot be complete.

Complete surveys were carried out for all resource areas for the Draft EIS, with the exception of cultural and paleontological resources (for Gen-Tie Alternative E only) and visual resources (for which still photography and simulations were prepared for all key observation points [KOPs]). The Final EIS presents further detail about the cultural and paleontological resources for Gen-Tie Alternative E, and more detail regarding indirect effects and incidental new cultural resources identified on the Gen-Tie Alternatives B and C alignment. However, this information is not substantially new, and does not change the conclusions presented in the Draft EIS. In addition, time-lapse video simulations of the DHSP and DSSF are presented in the Final EIS for two KOPs, including one new KOP that was requested to be added by Joshua Tree National Park. The conclusions on the severity and magnitude of impacts have not changed in the Final EIS. The cumulative analyses for cultural, paleontological, and visual resources has not been affected by this clarification of information between the Draft and Final EIS.

B006-34 The commenter states that the Draft EIS fails to consider all reasonably foreseeable impacts in the context of the cumulative impacts analysis and fails to provide the needed analysis of how the impacts might combine or synergistically interact to affect the environment in this valley or region. The commenter cites case law supporting these claims.

Sections 4.X.15 of the EIS present comprehensive, and in many cases a quantitative, analysis of cumulative effects for every resource. Synergistic interactions and combinations of effects are specifically addressed, where applicable. Because the commenter does not provide specific examples of any deficiency, this comment cannot be addressed further. No changes to the EIS are warranted.

B006-35 The commenter states that under NEPA, the Draft EIS must fully analyze indirect effects, including changes to land use patterns and induced growth. The commenter states that among the cumulative impacts to resources that have not been fully analyzed are impacts to desert tortoise, impacts to sand transport systems and down-wind Mojave fringe-toed lizard habitat, impacts to golden eagles, and impacts to water resources; in general the commenter states that the cumulative impacts to the resources of the California deserts has not been fully identified or analyzed, and mitigation measures have not been fully analyzed as well.

Cumulative and indirect impacts have been adequately addressed. Please see Section 4.4.16 for the analysis of cumulative impacts to desert tortoise, sand transport and Mojave fringe-toed lizard habitat, and golden eagle. Please see Section 4.20.15 for the analysis of cumulative impacts to water resources. The cumulative analyses contained in the EIS are consistent with statutory regulations and guidance resulting from case history, as described by the commenter. No changes have been made to the text.

B011-13 The commenter states that the EIS fails to adequately analyze cumulative impacts, stating that the EIS should have included other solar projects within the CDCA in the cumulative scenario.

The EIS does, in fact, consider numerous solar energy and other projects in the CDCA planning area. See Section 4.1, Tables 4.1-2, 4.1-2, and 4.1-3 (Draft EIS pages 4.1-6 through -22).

D002-4 The commenter questions whether the Riverside East Solar Energy Zone and the Paradise Valley development were considered in the cumulative analysis for the Draft EIS. The commenter questions the geographic range of cumulative analysis for air resources in the Draft EIS.

See responses to Comments B005-3 and -5.

F001-75 The commenter states that on page 4.2-26, the "Past, Present, and Reasonably Foreseeable Future Projects" section lists "projects under development," and this listing should distinguish between cumulative projects that are actually approved and under construction and cumulative projects that are undergoing environmental impact review.

The cumulative effects analysis considers existing, approved, and reasonably foreseeable projects in its analysis. Distinguishing between these project types as requested by the commenter would not meaningfully change the analysis or conclusions of the section. No changes have been made to the document.

ENERGY AND MINERAL RESOURCES

B008-19 The commenter states that if the project plans to mine for aggregate/rip-rap, impacts analysis of mining and agency review should be conducted. The commenter requests the source of aggregate/rip-rap, stating that if it comes from the closed Kaiser Mine additional NEPA/CEQA analysis would be required before restarting the mine. The commenter describes the "Give It Back!" campaign to restore the Kaiser Mine area to Joshua Tree National Park (JTNP) as legally required.

As stated in Section 2.5.5, aggregate would be sifted from on-site soil or trucked to the site from a BLM-approved commercial mine located 6 miles from the project site. Environmental review of this separate aggregate source has been conducted for that project, and is outside the scope of the Final EIS. Consideration of the Kaiser Mine restoration and its relationship to JTNP is also outside the scope of this document.

F001-145 The commenter requests that BLM supplement Section 4.10, Energy and Mineral Resources, with information regarding BLM's 2-year segregation of the Riverside East SEZ from mineral entry on 30 June 2009 and renewal of same on 30 June 2011. The commenter also requests that BLM explain that, while the proposed project would be consistent with the Solar Energy Zone, because its Form 299 was filed and accepted by BLM prior to 30 June 2009, the project qualifies as a "pending project" under the terms of the Supplement to the Draft Solar Programmatic EIS and therefore would not be subject to its terms if the Programmatic EIS is adopted in its current form.

The requested changes have been incorporated into the Final EIS.

ENVIRONMENTAL JUSTICE

B008-20 The commenter describes Environmental Justice and cites a 1984 report by Cerrell and Associates that identifies communities least likely to resist siting of polluting facilities. The commenter states that the project area fits the description in the Cerrell and Associates Report, especially in that it is not economically poised to oppose unwanted projects. The commenter states that current energy laws regulating both coal and renewable energy disproportionately affect low-wage earners by increasing rates, creating a morally and politically inequitable circumstance.

Section 3.16 describes the federal laws guiding analysis of environmental justice and provides background on the ethnic and income profiles of the project area. Section 4.16 analyzes the area for disproportionate impacts to these groups, and concludes that impacts would be unlikely, and there would be no unavoidable significant environmental justice effects. As stated in Section 4.16.6, "the population in the vicinity of the proposed project is well below the 50 percent threshold for poverty... having 4.3 percent of the population below the poverty level." A broader discussion of environmental justice in the context of energy laws and policy is outside the scope of this document.

C003-8 The commenter states that the analysis of environmental justice impacts in the Draft EIS is too narrow and fails to capture the disproportionate impacts felt by Native Americans, such as Colorado River Indian Tribes (CRIT) members, affiliated with the impacted cultural resources, citing Federal laws guiding analysis. The commenter states that the determination that an Indian tribe will experience disproportionate and adverse effects is sufficient to demonstrate an adverse environmental justice impact, and that Native Americans in the Project area feel a disproportionate effect caused by the damage and destruction of Tribal cultural resources because of their past and present connection to those resources. The commenter states that a "disproportionate and adverse effect" may be a cultural impact, the Draft EIS must be revised to acknowledge and mitigate for this environmental justice harm.

The Final EIS uses the "Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses" to define minority and low-income populations protected by Executive Order 12898. This document identifies minority or low-income populations in one of two ways, as stated in Section 3.16.2 in the Final EIS: The minority or low-income population of the affected area is greater than 50 percent of the affected area's general population; or the minority or low-income population percentage of the affected area is meaningfully greater (50 percent or greater) than the minority or low-income population percentage in the general population of the jurisdiction or other appropriate unit of geographic analysis (i.e., County, State, or Native American reservation) where the affected area is located. Given these definitions, the analysis of environmental justice provided in the Final EIS follows an appropriate methodology for consideration of environmental justice impacts, and its conclusions regarding these impacts are supported by the analysis.

F001-160 The commenter states that Appendix G of the State CEQA Guidelines does not provide a definitive list of environmental categories and significance criteria by which environmental analysis must be conducted under CEQA, and environmental justice effects, as discussed on page 4.16-13, are not physical effects on the environment and therefore are not per se within the scope of CEQA. The commenter requests that BLM replace the current language with an explanation consistent with F1-159.

While CEQA only analyzes physical effects on the environment, it also considers people as part of the environment. For example, if glare from solar panels were to disproportionately affect minority populations in the area, this would be a physical effect under CEQA, despite its effect only on people. However, because no significance criteria for environmental justice are provided under CEQA, a significance determination was not made in this document. No changes have been made to the document.

FIRE AND FUELS MANAGEMENT

A003-1 Riverside County Fire Department (RCFD) states that due to remote location and climate conditions, a fire or emergency event at DHSP would require multiple fire units to respond, requiring back fill at other stations to support regional demands.

The Draft EIS addresses the cumulative impacts of the DHSP on fire and fuels management in Section 4.8.15. On page 4.8-14, the Draft EIS states that while there would be a cumulative increase in fire impacts as a result of the proposed project, the document determines that the increase related to Alternatives 4-7 would not be cumulatively considerable, and with "implementation of MM FIRE-1 (a project-specific Fire Prevention Plan), which would ensure personnel are trained in emergency firefighting techniques, and that fire-protection equipment is available at the DHSP project site, the incremental increase in wildfire frequency and demands on emergency services of Alternatives C through E would be minimal."

A003-2 RCFD states that onsite conditions create a high risk potential for a technical rescue and/or hazardous materials incident, which would require specialized equipment and trained staff. This would result in extended response times to the project area.

While the impacts and risks associated with fires related to the DHSP cannot be eliminated, several mitigation measures are required that greatly reduce fire risk and facilitate emergency response efforts. MM FIRE-1 (pages 4.8-4 and 4.8-5) includes several measures to mitigate fire risk, but also requires a wildfire traffic control plan and the minimization of conflict with aerial fire crews to improve emergency response time and efficacy to the project area. MM PHS-5 (page 4.13-11) requires the development of an Emergency Response and Inventory Plan, including "special arrangements with emergency responders" and "relevant emergency procedures" to further facilitate emergency response.

A003-3 RCFD states that all water mains and fire hydrants providing required fire flows must be constructed in accordance with local laws, ordinances, regulations and standards, as well as the California Building and Fire Codes and relevant Riverside County Ordinances, and are subject to review by the RCFD. The commenter states that above ground storage tanks are also subject to review and approval by the RCFD Fire Marshall.

Section 3.8.1 describes the California Fire and Building Codes with regard to the proposed project (page 3.8-3). The remaining regulatory documents are included in the Final EIS, and the project owner will work with the fire marshal for review and approval of mains, hydrants, and storage tanks. AM HAZ-7 and HAZ-8 both require the project owner to comply with relevant BLM and Riverside County fire requirements, including development of a project-specific fire prevention plan. Section 4.8.6 (page 4.8-2) also states: "To reduce the risk of wildfire and ensure adequate response to potential wildfires, Mitigation Measures MM FIRE-1 (a project-specific Fire Prevention Plan), MM PHS-5 (a project-specific Emergency Response and Inventory Plan), and MM PHS-7 (a project-specific fire services agreement with Riverside County and BLM) would be implemented."

A003-4 RCFD states that as partial mitigation for the cumulative adverse impacts on the RCFD, the project owner will be required to participate in the County's Development Impact Fee Program (Ordinance No. 659). RCFD also requests that the project owner provide a training prop at two of the regional centers to help prepare emergency responders, as well as on-site training for emergency responders. RCFD states that they reserve the right to negotiate agreements with the project owner to ensure service demands are met.

The U.S. Supreme Court holding in *Nollan v. California Coastal Commission* (1987) 107 S.Ct. 3141 has established that the power to impose development impact fees requires the government establish the existence of a "nexus" or link between the fee and the state interest being advanced by the fee. Once the adverse impacts of a project have been quantified, the local government must then document the relationship between the project and the need for the conditions which mitigate those impacts. RCFD has not made a clear case that a nexus exists between the requested development impact fee and the adverse impacts of the project, i.e., it must be established that the fees proposed to be collected would mitigate the impacts of the project, and not impacts of other projects or of changes in natural conditions of the environment not caused by the project (e.g., drought). On the other hand, a training prop would directly serve to enhance existing mitigation for project impacts, as would training for emergency responders. Mitigation Measure MM FIRE-1 (subitem 13) has been added to the Final EIS.

A003-6 RCFD states that additional personnel will be necessary for staffing in the event of an emergency and in post-emergency investigation, including Occupational Safety and Health Administration (OSHA) and Riverside County incident reports.

See response to Comment A003-1.

A003-7 RCFD states that new facilities may be needed to accommodate storage and maintenance of additional staffing and fire rescue apparatus.

The project owner will coordinate with the RCFD as required by mitigation measures and Applicant Measures. New facilities may be required as part of this coordination, but are not required to be specified within the Final EIS.

A003-8 RCFD states that it is premature to determine that the DHSP will not result in fire/fuels management impacts, as stated in the Draft EIS, as there will always be a risk from accidental and natural fires in the project area, regardless of management and mitigation efforts.

The Draft EIS states that the project may increase fire risk in the area (pages 4.8-2 through 4.8-4; pages 4.8-9 through 4.8-10), but that these effects can be mitigated to a less-than-significant level by implementing the mitigation measures described in Section 4.8.

B008-18 The commenter states that the project's remote location makes it susceptible to fire hazards, especially as the nearest fire station is not equipped for large industrial fires, no fire hydrants are nearby, and fire trucks would have to drive 10 miles each way to fill with water. The commenter requests information on how DHSP plans for a worst-case fire scenario, and suggests a mitigation measure to construct a firehouse with a water source closer to the site.

Section 4.8.6 describes the direct and indirect effects of the project to fire related impacts. The project is located in an area of low to moderate fire susceptibility, but as noted by the commenter, its construction would increase the likelihood of fire ignition in the area. Mitigation Measures described in this section, including a project-specific Fire Prevention Plan (MM FIRE-1) and Emergency Response and Inventory Plan (MM PHS-5). The project owner would also develop and implement fire services agreement with Riverside County Fire Department and BLM to further increase fire preparedness and responsiveness (MM PHS-7). Regarding the commenter's suggested mitigation, all comments will be considered by the decision-maker in making a final decision.

F001-143 The commenter states that on page 4.8-4. MM FIRE-1 requires cessation of construction during “severe fire weather.” The commenter requests modification of the measure to require conferral with the local CAL FIRE office upon a “severe fire weather” declaration to determine whether work needs to stop.

The commenter's suggestion has been partially integrated into the document to reflect that work will be stopped during severe fire weather, but may be resumed if approved by the local CAL FIRE office.

GENERAL

A001-1 The commenter requests the section, township, and range description for the project site.

The project site is located in Sections 25, 26, and 27, Township 4 S and Range 15 E.

A004-19 The NPS requests to be removed from the List of Preparers.

This change has been made in the Final EIS.

A004-20 The NPS states that the Draft EIS fails to fully analyze impacts to protected park resources and values adjacent to the proposed project. The NPS further requests that requiring the project owner to enter into a cost recovery agreement with the NPS should be made a condition of the ROW grant and entered into the Record of Decision.

See response to Comment A004-1. With regard to the requested ROD condition, BLM will ensure that this provision is included in the ROD.

A004-29 The commenter notes that on the printed version of the Draft EIS distributed to the NPS, Section 3.19 was misprinted as Special Designations section instead of the Visual Resources section.

Please note that only certain printed copies were affected this way, and that the CD files and web-based files of the Draft EIS were distributed correctly, with Section 3.19 as the Visual Resources section.

A004-30 The commenter notes a discrepancy in distances from the Park reported in the Draft EIS.

See response to Comment A004-14.

A008-2 The commenter requests that the Final EIS specify which option will be used to connect the southwestern parcel with the on-site substation under Alternatives 4 and 5 (see page 2-8 of the Draft EIS).

The southern parcel may be connected to the on-site substation through either an underground or overhead connection covering 3,000 feet between the electrical power conversion stations on the southern and northern parcels. The discussion of electrical collection system in Section 2.5.4 (Structures and Facilities) provides more detail regarding these options; however, the final option has not yet been selected.

B006-39 The commenter provides several attachments to the comment letter, which have been indexed by BLM. Attachments are available for review at the Palm Springs Field Office.

B009-1 The Conservation Groups (Defenders of Wildlife, National Resource Defense Council, Sierra Club, and the Wilderness Society) state that it is important to transition to a renewable energy future that balances the needs of protected species and other environmental impacts associated with large scale solar developments. The Conservation Groups further note that large-scale energy development in largely undisturbed lands within the CDCA is not the only or best way to achieve energy independence, recommending instead disturbed agricultural sites, industrial sites, and other areas that don't support threatened or endangered species. The Conservation Groups acknowledge that the DHSP has fewer biological resource concerns than many other large-scale solar projects in the CDCA.

The BLM's multiple use mandate requires the agency to balance productive, recreation, and conservation uses on its lands, and the agency seeks to do this while minimizing impacts. Furthermore, as part of the Agency's responsibilities under Title V of the Federal Land Policy and Management Act (FLPMA; 43 U.S.C. 1761), the BLM must respond to the application for a ROW grant to construct, operate, maintain, and decommission a solar energy facility on public lands in compliance with FLPMA, BLM ROW regulations, and other applicable federal laws. The BLM agrees that a renewable energy future includes striking a balance between renewable energy development and the needs of threatened and endangered species. The Draft EIS includes no fewer than 28 alternatives, including 12 alternatives evaluated in detail. Several measures eliminated from analysis included consideration of private and contaminated sites (see Section 2.17.2). These sites were eliminated from consideration because of technological, logistical, or economic infeasibility to meet the BLM's purpose and need. The Final EIS also includes 71 mitigation measures, 20 of which work directly to minimize, avoid, or compensate for effects to special status species. No changes to the EIS are warranted as a result of this comment.

B009-15 The commenter provides several attachments to the comment letter, which have been indexed by BLM. Attachments are available for review at the Palm Springs Field Office.

B010-1 The commenter states that the Draft EIS does not adequately assess the effects of the project on the neighboring Desert Sunlight project including panel shading, dust, groundwater, and weeds.

See responses to Comments B010-1 through -4.

B011-2 The commenter states that the purpose and need reflects the Applicant's purpose and need, not the agency's purpose and need. The commenter states that the agency's purpose and need statement is inappropriately narrow, and that the EPAct encourages renewable energy development on public lands of 10,000 MW by 2015, and that Secretarial Order 3285A1 calls for identification and prioritization of renewable energy zones on public lands, none of which is narrow enough to require siting of utility-scale solar energy projects on public lands.

The project-level purpose and need for the proposed project is appropriately narrow as responding to the application before the BLM by the Applicant. This is not a planning-level document, for which the purpose and need would be far broader. The Solar PEIS has been prepared by the BLM to respond more generally to the EPAct and Secretarial Order 3285A1, and it is noted that the Desert Harvest Solar Project is located in the Riverside East Solar Energy Zone (BLM 2012). The SEZs have been identified as areas that are appropriate for utility-scale solar development in the Solar PEIS. The BLM's purpose and need is not inappropriately narrow for this project-level EIS, as it allowed the consideration of numerous alternatives, including alternate solar technologies (page 2-70) and alternate renewable technologies (page 2-72), in addition to offsite alternatives such as a contaminated sites alternative (page 2-69).

B011-7	The commenter states that the alternatives requiring a plan amendment should discuss the BLM's desert-wide obligation to achieve and maintain a balance between resource use and resource protection. The multiple use mandate of the BLM's CDCA Plan is described on Draft EIS page 3.22-1. As explained, a majority of the project and alternatives would be sited on land classified as Multiple-Use Class M, which are managed to provide for a wide variety of present and future uses such as mining, livestock grazing, recreation, energy, and utility development, while simultaneously conserving desert resources and mitigating damages to the resources which permitted resource uses may cause. This EIS appropriately mitigates resource use effects of the proposed project and alternatives, consistent with the multiple use mandate in the CDCA Plan.
B011-18	The commenter provides an index of attachments and multiple attachments to the comment letter. The attachments are available for review at the Palm Springs Field Office.
B011-19	The commenter provides several attachments to the comment letter, which have been indexed by BLM. Attachments are available for review at the Palm Springs Field Office.
D001-4	The commenter states that in his experience in the area over the last 25 years, BLM employees have stated that they are not given adequate time to complete environmental review of projects. The commenter states that the fast-track process is not legitimate, and that project approval should be more genuine in the future. The decision maker will consider all public comments when making a final decision.
D002-3	The commenter states that the project will have unavoidable adverse effects to air quality, vegetation, wildlife, night skies, wilderness, and recreation. The Draft EIS summarizes unavoidable adverse effects on page ES-6 in the Executive Summary. The decision-maker will consider the entirety of the EIS, including all comments, in making a final decision on the project and in issuing a ROD.
E004-1	The commenter states strong support for the project as a property owner in the area since 1971. The commenter states that the area has been struggling due to the closure of Kaiser Mine and unrealized agricultural potential, but that solar power will provide a lasting business and a resource that will allow for energy independence, global warming mitigation, and reduced conflict over energy resources. The decision maker will consider all public comments when making a final decision.

F001-8 The commenter revises the date listed for Secretarial Order 3285A1, listed on page 1-4, to read March 11, 2009, and suggests another minor editorial revision

The requested changes have been made in the Final EIS.

F001-9 The commenter requests that BLM correct the Applicant objectives list on page 1-5 as follows in order to render it consistent with the version submitted to BLM by the Applicant on 13 February 2012: "To maximize operational efficiency and provide low-cost renewable energy by locating the project on contiguous lands with high solar insolation values."

The requested changes have been made in the Final EIS.

F001-15 The commenter provides a series of specific revisions to the construction schedule, size of construction phases, and actions specific to project phases and locations.

The requested changes have been made in the Final EIS.

F001-16 The commenter suggests specific revision to page 2-12, "Site Access and Circulation," stating that the Kaiser Mine Road would provide access to the northern and southern portions of the project area and would include a lane for truck turn-off.

The requested changes have been made in the Final EIS.

F001-17 The commenter suggests specific revision to page 2-12, "Construction Workforce," stating that the project workforce would be recruited from San Bernardino, in addition to Riverside, County.

The requested changes have been made in the Final EIS.

F001-18 The commenter suggests specific revision to page 2-14, "Site Preparation, Surveying, and Staking," stating that security fencing will be put in place in sequence with project phasing, rather than prior to the beginning of construction.

The requested changes have been made in the Final EIS.

F001-19 The commenter suggests specific revision to page 2-14, "Vegetation Removal and Treatment," stating that the herbicide will include non-brand specific common formulations of BLM-accepted glyphosphate. The commenter also states that disturbance outside of internal engineering berms is not expected.

The requested changes have been partially incorporated in the Final EIS, with specific language revisions regarding the herbicide used made for clarity.

F001-20 The commenter suggests specific revision to page 2-14, "Solar Array Assembly and Construction," stating that the laydown area shown Figure 2-3 in Appendix A, is for Phase 1.

The requested changes have been made in the Final EIS.

F001-21 The commenter states that the assertion on page 2-25, Section 2.8, that Alternative 7 would have a nominal capacity of 150 MW is incorrect; the nominal capacity would be 125-135 MW.

The requested changes have been made in the Final EIS.

F001-22 The commenter requests that BLM clarify that in the first paragraph of Section 2.11.1, the 60-foot extension of the Alternative C ROW into the adjacent Chuckwalla DWMA is required solely to accommodate intermittent "wind sway" of overhanging conductors over the DWMA boundary.

The requested changes have been made in the Final EIS.

F001-29 The commenter suggests specific revisions to page 2-75, by eliminating a reference to the total mileage of gen-tie line Alternatives

BLM has clarified the text identified by the commenter, but has not omitted the total mileage of all gen-tie line alternatives, as this provides useful context.

F001-82 The commenter notes a typographical error in paragraph "h" of page 4.3-29, recommending deletion of the phrase "by funding."

The requested changes have been made in the Final EIS.

F001-83 The commenter requests that BLM replace references to "SB 34" in paragraph "j" of MM VEG-6 with "AB 13;" AB 13 superseded SB 34 on 29 August 2011.

The requested changes have been made in the Final EIS.

F001-91 The commenter states that the second sentence of the first paragraph of Section 4.3.12 should state that analysis for the EIS commenced upon publication of the Notice of Intent (NOI) on 15 September 2011 to be consistent with the rest of the EIS.

The requested changes have been made in the Final EIS.

F001-100 The commenter states that the last sentence of the "Alternative 3" paragraph on page 4.3-67 inadvertently refers to Alternative 2, and should be revised.

The requested changes have been made in the Final EIS.

F001-102 The commenter states that the fourth paragraph of page 4.4-1 should refer to Alternative 4 (not Alternative 3), and should not be considered the Applicant proposed solar project.

The requested changes have been made in the Final EIS.

F001-119 The commenter recommends a revision to the first paragraph of Section 4.4.12 on page 4.4-42 to state that the commencement of analysis for the EIS began in September 2011.

The requested changes have been made in the Final EIS.

F001-121 The commenter recommends specific additional text for page 4.4-50 to clarify that the 60-foot extension of the Alternative C ROW into the adjacent Chuckwalla DWMA is required solely to accommodate intermittent “wind sway” of overhanging conductors over the DWMA boundary.

The requested changes have been made in the Final EIS.

F001-125 The commenter recommends replacing the word “vegetation” with “wildlife” in the first paragraph of page 4.4-56

The requested changes have been made in the Final EIS.

F001-129 The commenter recommends replacing the word “vegetation” with “wildlife” in the second full paragraph of page 4.4-66

The requested changes have been made in the Final EIS.

F001-130 The commenter states that Section 4.6, Cultural Resources, refers in several places to a “pipeline” as a component of the proposed project; no pipeline is part of the proposed project. The commenter requests that BLM delete all pipeline references.

The requested changes regarding the pipeline have been made to the document.

F001-148 The commenter requests that BLM clarify that in the first paragraph of Section 4.11.12, the 60-foot extension of the Alternative C ROW into the adjacent Chuckwalla DWMA is required solely to accommodate intermittent “wind sway” of overhanging conductors over the DWMA boundary.

The requested changes have been made in the Final EIS.

F001-152 The commenter states that project operation and maintenance will require 8 full-time employees, not 16 as stated on page 4.12-12 in the first paragraph of “Operation and Maintenance.”

The requested changes have been made in the Final EIS.

F001-153 The commenter requests that BLM change the reference to Alternative “C” in the first sentence of the “Noise from Decommissioning Activities” paragraph on page 4.12-24 to Alternative “B.”

The requested changes have been made in the Final EIS.

F001-155 The commenter states that the second sentence of the “Indirect Effects” paragraph on page 4.14-2 states that the project should be revised to describe a peak construction workforce of up to “250” workers, consistent with the fourth sentence of the same paragraph and the construction workforce estimates of page 2-12 of the Draft EIS.

The document states that the peak workforce could be 315 workers, which represents the combined peak workforces for the solar facility (250) and the gen-tie line (65). The paragraph has been revised accordingly.

F001-157 The commenter requests that BLM delete the inadvertent references to "energy and mineral resources" on page 4.14-5

The requested changes have been made in the Final EIS.

F001-165 The commenter recommends revising the fourth sentence of the first paragraph of Section 4.17.11 (page 4.17-11) because it is incorrectly premised upon the cumulative projects baseline instead of the project-specific baseline, which presumes construction of Alternative B by the project owner.

The referenced sentence was included in error. The recommended revisions have been made in the Final EIS.

F001-174 The commenter recommends deleting the second and third sentences of the first paragraph of MM VR-5 on page 4.19-18 because they are already appear in the Alternative 4 effects analysis (page 4.19-11) and recommends that BLM explain rather than describe the mitigation measure. The commenter recommends that BLM replace the deleted sentences with the specific language to allow for strategic placement of intervening vegetation if approved by BLM, Riverside County and the Resource Agencies as part of the project's Vegetation Resources Management Plan.

Regarding the text of MM VR-5, the document provides the full text of the requirements of the measure under the heading of the measure. Although these requirements are previously described, they appear in full under the heading of the measure to ensure that the measure's requirements are fully understood by the public and complied with by the project owner. No changes have been made to the document.

LANDS AND REALTY

A003-5 RCFD states that the DHSP is subject to Board of Supervisor's Policy B-29, General Plan Amendment No. 1080, and Ordinance 348.4705 requiring an annual payment of $450 to the County for each acre involved in the power production process and a term requiring the solar power plant owner to secure the payment of sales and use taxes. RCFD states that because DHSP proposes to use County road ROW, these agreements are required

Pending ongoing litigation regarding Policy B-29, the BLM acknowledges the $450 per acre payment to the County required by Policy B-29.

A008-12 The commenter requests that Table 3.11-2 on page 3.11-7 of the Draft EIS include a description of the proposed water and transmission line ROWs and the Federal Energy Regulatory Commission (FERC) withdrawal associated with the proposed Eagle Mountain Hydroelectric Pumped Storage Project. The commenter further requests consideration of the effects of that project on gen-tie alternative routes, the southwestern parcel of the proposed project, and any transmission necessary under Alternatives 4 and 5 to connect the two areas of the proposed solar project.

The Final EIS describes the water pipeline and FERC withdrawal area associated with the proposed Eagle Mountain Hydroelectric Pumped Storage Project in Chapter 2 (Section 2.5.5) and are shown in Figure 2-3a in Appendix A. Sections 3.11 and 4.11 have also been updated to address this encumbrance.

A010-1 The commenter states support for increasing the development of renewable energy resources in an expeditious and well planned manner to help the nation meet energy requirements while reducing GHG emissions and encourages long-term sustainable balance between available energy supplies, energy demand, and protection of ecosystems and human health. The commenter references extensive formal scoping comments previously provided in October 2011. The commenter states that the because the project is located within the DRECP study area and the Riverside East Solar Energy Zone defined in the Solar Programmatic Draft EIS, the project should integrate analyses from and consistency with these documents.

The DRECP has not yet been published, and is a working planning process. Therefore, the Final EIS cannot, and is not required to, demonstrate the project's consistency with the DRECP. However, according to the DRECP starting point map (http://www.drecp.org/maps/Starting_Point_Maps.pdf), the Desert Harvest Solar Project and all action alternatives are located within the “Renewable Energy Areas” and outside of the “Conservation Opportunity” areas. The project would appear to be consistent with the initial stages of the DRECP planning process. Similarly, the Final Solar PEIS was not available as of the date of publication of the Desert Harvest Solar Project Draft EIS. Furthermore, the Solar PEIS is not intended to cover “pending applications,” which includes the DHSP. Therefore, the EIS is not required to show compatibility with the Solar PEIS. Nevertheless, it should be noted that the EIS does include 73 mitigation measures to minimize, mitigate, and compensate for adverse effects of the DHSP. The DHSP is not inconsistent with any element of the Final PEIS.

A010-23 EPA recommends that the Final EIS elaborate on the DRECP and Solar PEIS, and include up-to-date maps illustrating the current boundaries and conceptual alternatives that are relevant to the proposed project. EPA recommends that BLM discuss whether the site is expected to be included within the Riverside East Solar Energy Zone and acknowledge that additional requirements and/or conditions may apply upon approval of the DRECP and/or the Solar PEIS.

See response to Comment A010-1.

B006-1 The commenter provides an introduction to the detailed comments that follow, and state that the BLM's analysis fails to comply with FLPMA, stating that the Draft EIS does not provide the specific language of the CDCA Plan amendment. The commenter suggests that, given the multiple use mandate of the BLM and the varied resource impacts of the project, the BLM may need to consider other CDCA plan amendments besides the one that would cover the project site; given this, the commenter suggests that the BLM should have potentially considered other Plan Amendment alternatives in the EIS.

The Final EIS includes the specific language and map revisions to the CDCA Plan in Chapter 2 (Section 2.5.2).

B006-2 The commenter states that BLM has not taken a comprehensive look at the proposed plan amendment for the ROW to determine: 1) whether industrial scale projects are appropriate for any public lands in this area; 2) if so, how much of the public lands are suitable for such industrial uses given the need to balance other management goals including preservation of habitat and water resources; and 3) the location of the public lands suitable for such uses. The commenter further states that BLM has not addressed how the EIS intersects with the Solar PEIS and the DRECP being prepared in part by BLM. The commenter is concerned that this is piecemeal approach to project review, which violates the bioregional approach in the CDCA Plan and the planning principles of FLPMA.

The suggested revisions are appropriate for a planning-level EIS to adopt an update to the CDCA Plan as a whole, and are beyond the scope of this project-level EIS. The required determinations for a land use plan amendment are disclosed in the EIS in Table 3.22-1 on pages 3.22-5 and 3.22-6. With regard to the Solar PEIS and DRECP, see response to Comment A010-1 and B005-3.

B006-3 The commenter states that the Draft EIS does not consider the impacts of the project and plan amendment in the context of the FLPMA and the CDCA Plan, providing specific citations from both.

The required determinations for a land use plan amendment are disclosed in the EIS in Table 3.22-1 on pages 3.22-5 and 3.22-6.

B006-4 The commenter acknowledges that the CDCA Plan anticipated multiple amendments over the life of the plan, noting that one of the requirements for analysis of plan amendments is to determine whether alternative locations are available within the CDCA that would meet the Applicant's needs without requiring a change in the Plan's classification or an amendment to any Plan element. The commenter states that BLM has a further obligation under the plan amendment process to determine how the proposed amendment will affect desert-wide resource protection.

As described in Table 3.22-1 on page 3.22-5 of the Draft EIS, the CDCA Plan does not currently identify any sites as solar generating facilities. Therefore, there is no other location on public land within the CDCA which could serve as an alternative location without requiring a Plan Amendment. The solar facility does not require a change in the Multiple-Use Class classification.

As further described in this table, the EIS evaluates the balance between resource use and resource protection desert-wide. Title VI of the FLPMA, under California Desert Conservation Area, provides for the immediate and future protection and administration of the public lands in the California desert within the framework of a program of multiple use and sustained yield, and maintenance of environmental quality. Multiple use includes the use of renewable energy resources, and through Title V of FLPMA, the BLM is authorized to grant rights-of-way for generation and transmission of electric energy. The acceptability of use of public lands within the CDCA for this purpose is recognized through the Plan's approval of solar generating facilities within Multiple-Use Class M. The purpose of the EIS is to identify resources which may be adversely impacted by approval of the proposed project, evaluate alternative actions which may accomplish the purpose and need with a lesser degree of resource impacts, and identify mitigation measures and Best Management Practices (BMPs) which, when implemented, would reduce the extent and magnitude of the impacts and provide a greater degree of resource protection. These resources are evaluated on a cumulative basis in the EIS, allowing the public and the BLM decision-maker to consider how the DHSP affects desert-wide resources.

B006-5 The commenter states that the Draft EIS did not consider landscape-level issues and management objectives or alternatives to the proposed plan amendment.

See response to Comment B006-4.

B006-6 The commenter states that BLM should have considered the impacts to existing land use plans for public lands across several scales including the Chuckwalla Valley, the Colorado Desert, and the CDCA Planning Area.

See response to Comment B006-2.

B006-7 The commenter states that the Draft EIS does not address impacts to MUC M lands and loss of multiple use in favor of a single use for industrial purposes.

The project would not result in a loss of multiple use in favor of a single use on MUC lands as argued. The project's expected lifetime is 30 to 50 years, after which time, the land is expected to be returned to its existing condition.

B006-9 The commenter states that the Draft EIS does not address other ongoing planning efforts including the Solar PEIS and the DRECP.

See responses to Comments A010-1 and B005-3.

B008-3 The commenters state that the DRECP, currently under development, has the authority to designate and amend public land uses. The commenter recommends that the DRECP consider the conservation alternative proposed in Comment B008-2, with the amendment of the Imperial 2 Solar Project land use designation as an example.

Consideration of amendments to the DRECP is outside the scope of this document.

B011-17 The commenter states that the project violates FLPMA because the BLM did not analyze the required criteria for making a CDCA Plan Amendment. The commenter further states that the BLM did not consider alternatives that avoid impacts to cultural resources including Native American remains.

The EIS does not violate FLPMA and the required disclosures have been made in the Final EIS. See response to Comment B006-3. No Native American remains have been identified on the site of the proposed project or any alternative.

D002-11 The commenter rhetorically questions whether, given Comment D002-10, we are making good decisions with our land use planning efforts.

The decision-maker will consider all comments in making a final decision on the project.

F001-147 The Applicant requests that BLM revise the second sentence of the second paragraph of “Applicable Land Use Plans, Policies, or Regulations” on page 4.11-8 to show that the private parcel referenced is in fact owned in fee by Riverside County.

The requested revisions have been made in the Final EIS.

F001-149 The commenter states that the cumulative effects analysis of Alternative 4 on page 4.11-18 should take into consideration that a loss of access to lands managed by BLM for multiple-use as a result of energy development projects is not necessarily an adverse effect to lands and realty, as energy development is consistent with the multiple-use mandate of FLPMA, particularly where, as here, the lands in question have already been segregated as part of the proposed Riverside East Solar Energy Zone, and identified as among the BLM-administered lands best suited for solar development. The commenter adds that the last paragraph of the Alternative 4 analysis should also take into account that most of the project study area is BLM-administered land that (i) is segregated from entry as part of the proposed withdrawal of the Riverside East Solar Energy Zone; and (ii) is subject to the primary land use authority of the federal government, rather than state or local government.

The record of decision for the Solar PEIS has not yet been signed. The EIS evaluates effects to land use based on existing laws and policy at the time of the commencement of environmental analysis (September 2011). No changes to the EIS are warranted as a result of this comment.

MITIGATION MEASURES

A008-15 The commenter states that all employees, contractors, and on-site personnel should receive the Worker Environmental Awareness Program (WEAP) training (page 4.3-14).

The final section of Mitigation Measure MM Veg-1 has been updated in the Final EIS to reflect that “all project employees, contractors, and on-site personnel” will receive the WEAP training.

A010-6 EPA recommends that BLM commit, in the Final EIS and ROD, to measures for this project similar to those adopted for the Desert Sunlight Solar Project to protect portions of the right-of-way that were avoided due to resource impacts, and encourages BLM to consider such a land use policy modification through the development of the DRECP. The commenter states that the Final EIS should update discussions of, and demonstrate consistency with, the DRECP and the Solar PEIS.

Mitigation measures similar to those required for the Desert Sunlight project have been adopted for the Desert Harvest Solar Project. A portion of the Desert Sunlight ROW application area included excellent quality desert tortoise habitat, and numerous live tortoises were found on the northern portion of the original ROW application area. The DHSP site is very different, in that it provides only low-quality desert tortoise habitat and no live tortoises were found during protocol surveys. Eliminating a portion of the ROW for DHSP development would not be appropriate in this case. Also, see response to Comment A010-1.

A012-7 The commenter states that BLM should require all employees, contractors, and onsite personnel to receive WEAP training.

Please see response to Comment A008-15.

B006-15 The commenter states that the EIS fails to adequately analyze the direct, indirect, and cumulative impacts of the proposed project on the environment. The commenter states that the BLM fails to look at reasonable mitigation measures to avoid impacts; even in those cases where the extent of impacts may be somewhat uncertain due to the complexity of the issues, BLM is not relieved of its responsibility under NEPA to discuss mitigation of reasonably likely impacts at the outset. The commenter states that the lack of comprehensive surveys does not allow the project to avoid and minimize impacts and define and quantify appropriate mitigation, and thus the Draft EIS fails to provide information necessary for decision-makers and the public to adequately review the proposed project. The commenter states that these insufficiencies necessitate a supplemental or revised Draft EIS that provides additional alternatives avoiding or reducing biological resource impacts.

A supplemental or revised Draft EIS is not warranted.

B006-16 The commenter states that the recirculated Supplemental Draft EIS (described in Comment B006-15) should consider and include the final recommendations of the Independent Science Advisors (ISA) that was convened by the Desert Renewable Energy Conservation Plan, which are currently not followed in the Draft EIS. These recommendations include “Maximize Use of Already Disturbed Lands,” “Avoid Soil Disturbance,” “Avoid Disrupting Geological Processes,” and avoid transplantation and relocation of wildlife except as a last resort (never as full mitigation).

See responses to Comments A010-1 and B005-3.

B006-28 The commenter states that because the Draft EIS fails to provide adequate identification and analysis of impacts, it also fails to identify adequate mitigation measures for the project’s environmental impacts, citing case law regarding the need for detailed mitigation measures. The commenter states that because the Draft EIS does not provide a full analysis of possible mitigation measures, BLM cannot properly assess the likelihood that such measures would actually avoid the impacts of the proposed project.

See response to Comment B006-10.

B010-4 The commenter states that effects related to groundwater, vegetation, and weeds should be able to be distinguished from those of the Desert Sunlight project.

Mitigation measures are set forth in the water resources and biological resources section of the EIS to ensure that the project's effects on groundwater and groundwater-dependent vegetation and weeds are monitored. The burden of proof is on the project owner to demonstrate that the effects are due to an adjacent project. Additional mitigation is not warranted.

B011-16 The commenter states that the project proposes the use of solar thermal technology and the EIS should include a photovoltaic alternative.

The commenter is mistaken. The project proposes to use solar photovoltaic technology.

F001-74 The commenter states that Section 4.1, Environmental Consequences, should include a general provision specifying that the project owner shall be copied on all third party (e.g., biological monitor) agency reporting requirements established by the mitigation measures of the Draft EIS.

The requested changes have been incorporated into the Final EIS and the Mitigation Monitoring and Reporting Plan.

NEPA/CEQA REQUIREMENTS

B004-1 The commenter requests notice from the County of Riverside for all notices issued under CEQA related to the DHSP.

The BLM is not responsible for any separate noticing that may be required of Riverside County as the CEQA Lead Agency, but the request has been forwarded to Riverside County by BLM. In addition, the reader is directed to page 1-12 in Chapter 1 of the Draft EIS, which describes the means by which public notice for the EIS was performed in compliance with all CEQA requirements.

B004-2 The commenter states that the requirements of CEQA differ in several respects from the requirements of NEPA, and claims that a separate CEQA review and comment process will be required in addition to the NEPA review that is currently underway.

The commenter is directed to Section 1.8 (beginning on page 1-10 of the Draft EIS). This "CEQA Readers' Guide" describes the differences between CEQA and NEPA, and details the means by which the EIS meets all of the unique CEQA requirements pursuant to Section 15221 of the CEQA Guidelines. Public Resources Code (P.R.C.) Section 21083.7 provides that a CEQA Lead Agency "shall, whenever possible" use an EIS as an Environmental Impact Report. This EIS has been prepared to a CEQA-equivalent standard pursuant to P.R.C. Section 21083.7 and Section 15221 of the CEQA Guidelines. The CEQA Readers' Guide summarizes information in the EIS that has been included to ensure it is a CEQA-equivalent document. Table 1-3 in the Draft EIS (page 1-11) shows where readers may find specific CEQA-relevant information. A separate CEQA document and comment process are not anticipated because the EIS fulfills CEQA obligations.

B006-10 The commenter states, citing case law, that BLM should not approve a management plan amendment based on outdated and inadequate inventories of affected resources on public lands. The commenter states that BLM failed to compile an adequate inventory of the resources of the public lands that could be affected by the proposed project before preparing the Draft EIS (including, e.g., desert tortoise densities, rare plants, golden eagle surveys, and other biological resources) which is necessary in order to adequately assess the impacts to resources of these public lands in light of the proposed plan amendment, and that BLM has also failed to adequately analyze impacts on known resources. The commenter provides specific examples in support of this point and states that revised Draft EIS or supplemental Draft EIS must be prepared to include several categories of new information including new survey data about the resources of the site and potential impacts of the project on resources of our public land and water, and that document must be circulated for public review and comment.

The requested inventories have been carried out and effects fully disclosed in the EIS. Please see Appendix C (Biological Resources) of the Final EIS. In addition, supplemental archaeological resources, indirect built environment effects, and paleontological resources studies have been incorporated into the EIS. See Sections 3.6, 3.7, 4.6, and 4.7 of the Final EIS. Additional survey data are not warranted.

B006-11 The commenter states that BLM's failure to provide an adequate current inventory of resources and environmental review undermines BLM’s ability to protect and manage these lands in accordance with statutory directives. The commenter states that BLM has failed to properly identify and analyze impacts to the resources including the impacts from all of the project components, thus violating NEPA by not ensuring that the proposal does not cause unnecessary and undue degradation of public lands. The commenter cites case law in support of these points.

The EIS complies fully with NEPA. See also response to Comment B006-10.

B006-12 The commenter states that NEPA requires an EIS to analyze specific direct, indirect, and cumulative impacts (not just provide general or conclusory statements) and to ensure the scientific integrity and accuracy of the information provided. The commenter states that the Draft EIS is missing such information and that it (or worst-case scenario data) should be provided in an additional, revised, or supplemental EIS. The commenter states that agencies cannot narrow the purpose and need statement to fit only the proposed project, and that the DHSP purpose and need is impermissibly narrow, requiring revision and recirculation of the Draft EIS. Additionally, the commenter states that the Draft EIS does not clearly identify the amendment to the CDCA Plan as part of the project or describe the amendment.

A revised or supplemental EIS is not warranted. The Final EIS fully analyzes all potential direct, indirect, and cumulative resource effects in depth and at an equal level of detail for all alternatives.

B006-14 The commenter states that the Draft EIS fails to provide NEPA-required adequate baseline information and descriptions of the environmental setting in many areas because of inadequate survey information. The commenter states that impact analysis is difficult without adequate baseline information and that a supplemental document is required to fully identify the baseline conditions of the site.

See response to Comment B006-10.

B009-2 The commenter states that the Draft EIS does not state whether the National Park Service acted in the capacity of a Cooperating Agency in the preparation of the Draft EIS. The commenter further states that although the EIS is intended to satisfy CEQA requirements, it does not appear that local agencies are participating in the Draft EIS. The commenter requests a discussion of how NEPA and CEQA requirements are being coordinated. The commenter questions whether any special provisions of CEQA, such as fully mitigating impacts to state resources, are included in the mitigation measures in the EIS. Finally, the commenter recommends that a joint EIS/EIR would be the most efficient way to achieve the multiple stated goals.

Section ES.2 of the Draft and Final EIS discuss the NPS's role as a Cooperating Agency, stating "The National Park Service has actively engaged in EIS planning and reviewing documentation relating to the proposed project and alternatives. The introduction to Chapter 1 further defines the role of the NPS as a cooperating agency, stating "although the NPS does not have the jurisdiction to issue any permits for the proposed project or alternatives, the BLM has requested that the NPS provide its technical expertise in the evaluation of impacts in this EIS." Further information is available in the Memorandum of Understanding (MOU) signed by the BLM and NPS defining their relationship (Section ES.2 of the Draft and Final EIS also identifies Riverside County as a cooperating agency. Section 1.6.2 states that "The County of Riverside and BLM have signed an MOU that defines the relationship of the two agencies, and identifies the County of Riverside as a Cooperating Agency with the BLM." This MOU is included in Appendix L of the Final EIS.

Regarding CEQA, Section ES.2 of the Draft and Final EIS defines Riverside County as the Lead Agency under CEQA. The section states that the "County of Riverside... intends to determine whether this EIS complies with the requirements of CEQA, and if so, to use this EIS to provide the environmental review required for its decision regarding the approval of a gen-tie action alternative under CEQA." Section 1.8: CEQA Reader's Guide provides extensive information on the document's fulfillment of CEQA, and states that "This EIS has been prepared to a CEQA-equivalent standard pursuant to Public Resources Code (P.R.C.) Section 21083.7 and Section 15221 of the CEQA Guidelines." Each issue area described in Chapter 4 discusses the project's effects and significance under CEQA in addition to NEPA.

B011-1 The commenter provides an introduction to NEPA as it relates to renewable energy projects, and states that the Draft EIS is too long and convoluted, failing to properly inform the public of the nature and consequences of the project.

The length of the document is considered necessary to evaluate this especially complex project, which has numerous resource protection challenges and no fewer than 12 alternatives evaluated at an equal level of detail. The executive summary provides a full disclosure of all of the anticipated environmental effects, and provides a guide for readers to follow if they wish to engage with the EIS more deeply on any given topic. No changes to the EIS are warranted.

B011-14 The commenter states that a programmatic EIS should have been prepared given the large number of solar projects.

The BLM did prepare a programmatic EIS for solar development in the west (see http://solareis.anl.gov/). In order to further the renewable energy goals provided for in the BLM's purpose and need for this and other pending solar projects, certain projects, including the DHSP, were exempted from the programmatic planning process. See response to Comments A010-1 and B005-3.

F001-159 The commenter states that unlike NEPA, CEQA pertains solely to physical effects on the environment. With regard to Section 4.15.16 of the Draft EIS, the commenter notes that 14 CCR 15064 and 15382 provide that social and economic changes per se may not be treated as significant effects on the environment under CEQA.

The CEQA significance criteria listed in Section 4.15.16: CEQA Considerations, are taken from Appendix G of the California Environmental Quality Act (CEQA). These criteria reference physical effects, such as generation of waste and disruption of the utility systems, and are stated in full in the document. The analysis provided in the Final EIS analyzes each of these significance criteria individually. No changes have been made to the document.

NOISE AND VIBRATION

A004-11 The commenter states that Section 3.12.2 (Existing Conditions, Noise) does not address the Wilderness Areas of Joshua Tree National Park, and requests that a discussion of the natural ambient sound level in the Wilderness should be added. The commenter further states that many units of the National Park System have natural ambient sound levels well below the 45 dBA Leq referenced as the rural noise standard for solar energy development in Riverside County, and that applications of this standard in areas adjacent to Park wilderness could adversely effect the Park. The commenter requests that ambient natural sound levels be maintained during construction and operations (i.e., no increase in ambient sound as a result of the project).

Sections 3.12 and 4.12 of the Final EIS has been updated to incorporate the commenter's recommendations.

A004-18 The commenter notes that Draft EIS page 4.12-9 (Noise and Vibration) states that noise on Kaiser Road south of Lake Tamarisk will increase between 9.5 dBA (1-hour Leq) and 11.4 dBA (CNEL); and when the cumulative effects of the Desert Sunlight project area added the noise in this area increases from 11.6 (Leq) to 13.6 (CNEL). The commenter states that a 10 dBA increase is generally perceived as a doubling of the loudness.

The quoted noise levels are for Kaiser Road north of Lake Tamarisk, as shown in Tables 4.12-3 and 4.12-8 (cumulative). As stated in the paragraph immediately following Table 4.12-3, "A 10 dBA noise level increase represents a doubling of perceived noise levels." The noise level increase along Kaiser Road north of Lake Tamarisk is stated as being "substantial."

A004-26 The NPS requests that NPS management policies be added to the Final EIS and notes that these policies address noise impacts in Sections 4.9 and 8.2.3, stating "natural ambient sound level — that is, the environment of sound that exists in the absence of human-caused noise — is the baseline condition, and the standard against which current conditions in a soundscape will be measured and evaluated." The commenter notes that further guidance can be found in NPS Director's Order #47.

As requested by the commenter, information regarding the NPS management policies has been added to Section 3.12.1, Applicable Plans, Policies, and Regulations." The National Park Service's performance standard for noise mitigation, which is to limit noise levels at the Joshua Tree National Park boundary from the project to 35 dBA, has been addressed in the revised impact discussion in Final EIS Section 4.12.

A004-27 The commenter states that the discussion of noise-sensitive land uses does not include a discussion of the wilderness areas of Joshua Tree National Park, and recommends that a discussion of Wilderness Areas and the ambient sound level should be included. The commenter notes that National Park Service Management Policies require all acoustic conditions to be evaluated against the natural ambient sound level.

Section 3.12.2, Existing Conditions, includes a discussion of existing noise-sensitive land uses. Within this section it is stated that "Joshua Tree National Park encompasses the project area, and is located 1.8 miles to the northeast, 3.5 miles to the west, and over 7 miles to the north (see Figure 3.12 1 in Appendix A)." Furthermore, the revised impact discussion in Final EIS Section 4.12 includes analysis of impacts on Joshua Tree National Park.

B008-12 The commenter states that project construction would bring hundreds of new people to the area, in addition to the 300-400 employees working at Desert Sunlight, resulting in law enforcement issues. The commenter states that local residents will be exposed to noise (transformer hum, tracking panel squeal) that will be in contrast to the quiet desert setting and will create serious mental stress, as analyzed in other projects. The commenter states that construction noise from Desert Sunlight is sometimes unbearable, will be compounded by the DHSP, will impact neighboring wilderness and JTNP, and should be limited to hours between 6:00 am and 6:00 pm. The commenter cites additional health issues related to low frequency and infrasonic noise, and requests mitigation for these impacts, stating that previous projects have not adequately mitigated noise.

Section 4.12 provides a detailed discussion of noise impacts and mitigation measures associated with the project. The project would abide by relevant noise laws and standards, and mitigation measures ensure that noise would not exceed these levels. Construction time would be limited when occurring near residences, as described in MM NOI-1, and MM NOI-2 necessitates that the project will not create a net increase to ambient noise in Joshua Tree National Park. The decision-maker will consider all comments when making a final decision.

F001-5 The commenter states that in Table ES-1, Significance Criterion NZ-4 threshold of significance is specific to "long-term impacts on noise sensitive land uses by increasing long-term ambient Community Noise Equivalent Level (CNEL) levels by 10dBA or more." The Applicant states that as a physical matter, this standard should not trigger a significant and unmitigable impact north of Lake Tamarisk Road because there are no sensitive receptors located north of Lake Tamarisk Road where the short-term impact (two years during construction) would occur; the description of the threshold should note that this is a conservative conclusion based on the 10 dBA standard rather than on actual sensitive receptors.

As identified in Figure 3.12-1, sensitive receptors are located along Kaiser Road north of the community of Lake Tamarisk. The increase in ambient noise levels along Kaiser Road during the two years of construction would result in a significant and unavoidable impact, as stated. No changes to the EIS are required.

F001-150 The commenter requests that BLM consider revising Table 4.12-1 by deleting the "substation column" (which is not a feature of the Desert Harvest Solar Project) and by condensing the "Solar Facility" and "Gen-Tie Transmission Line" columns into a single column entitled "Distance to Closest Existing Residence" with the same 6,500-foot value for Alternatives 4 through 6 and the values of 500, 500, 1,450 and 900 feet for Alternatives B through E, respectively. The commenter also requests that BLM delete the "Alternative A – No Gen-Tie" row from the table.

An onsite substation is a feature of the proposed project, as described in Section 2.5.4: On-Site Substation; this column has been maintained in the Final EIS. Columns for Solar Facility and Gen-Tie Line Alternatives have been merged in the Final EIS, and the row for Alternative A has been removed.

F001-151 The commenter recommends a specific revision to clarify the noise analysis on Draft EIS page 4.12-5.

The requested changes have been made in the Final EIS.

F001-154 The commenter requests that BLM revise the last sentence of the second paragraph of page 4.12-40 to reflect the non-cumulative baseline of the Draft EIS, under which the project owner would construct Alternative B.

The requested changes have been made in the Final EIS.

F001-205 The commenter states that Table 4.24-1, Noise and Vibration, notes that the traffic would result in a substantial increase in noise levels north of Lake Tamarisk Road, but Section 4.12.6 notes that this level of noise at 50 feet would be within Riverside County's conditionally acceptable range for rural residential land uses and within 180 feet would be back within the normally acceptable range for rural residential land uses.

Section 4.12.6: Residual Impacts and Unavoidable Adverse Effects states that "Implementation of Alternative 4 would result in a substantial increase (>10 dBA) in traffic noise levels above existing ambient noise levels along Kaiser Road north of Lake Tamarisk Road during construction and decommissioning, which would result in an unavoidable adverse effect." This conclusion is accurately restated in Table 4.24-1. No changes have been made to the document.

PALEONTOLOGY

F001-142 The commenter states that the fourth sentence of the "Indirect Effects" paragraph of pg. 4.7-3 should be comparative, not absolute: "Therefore, the potential for adverse indirect effects on paleontological resources is higher."

The document provides effects analysis based on supporting evidence, drawing the conclusion that there is a high potential for adverse indirect effects on paleontological resources based on the evidence provided, including that "geologic units present at the site have a high potential to contain vertebrate fossils and other scientifically valuable paleontological resources." The conclusion drawn in this section does not state that effects would be large, but rather considers the potential for effects. The commenter's recommended language, suggesting the use of a comparative statement, does not state what the effects would be compared to and does not substantially change the meaning of the existing text. No changes to the document have been made.

PUBLIC HEALTH AND SAFETY

A003-9 RCFD states that damaged PV panels may release emissions that create a toxic environment for plant workers and emergency personnel, and that the Fire Chief will enforce California Fire Code safety, health, and welfare standards.

The Draft EIS discusses the risk of toxic material release due to fire on page 4.13-4. The final PV technology and the potential for toxic chemical release have not yet been determined. The analysis in the document concludes that with mitigation incorporated, this impact would not be significant, regardless of the chosen technology: "The DHSP may use a variety of PV technologies, including copper indium gallium cyanide panels, which are manufactured using the toxic elemental metal cadmium. Chemicals within PV modules are highly stable; even if the modules become broken or damaged during construction, these substances would not mobilize into the environment except under extremely rare conditions. A fire at the Alternative 4 site during construction could release chemicals from installed PV panels; however, fires are unlikely to occur because of the lack of fuel to support a sustained wildfire. Grass fires are the most likely fire exposure for ground-mounted PV systems, and these fires tend to be short-lived. As a result, these fires are unlikely to expose PV modules to prolonged fire conditions or to temperatures high enough to volatilize panel constituents. Mitigation Measure (MM) FIRE-1 would also reduce potential effects from related fire risks....Therefore, the use of PV panels and other project components would not have any adverse, unavoidable effects on public health and safety."

B008-13 The commenter cites research on the impacts of electromagnetic fields (EMF), which states that most twentieth century diseases of civilization, including cancer and cardiovascular disease, are caused by EMF exposure. The commenter states that the study's author assessed EMF levels around the commenter's property and in the project area are extremely high due to transmission lines; increased transmission in the area will further threaten the health and life of the commenter and others in the area

As stated in the Draft EIS, Section 4.13, generation of EMF is not considered a NEPA or CEQA issue and no impact significance is presented because: 1) there is no agreement among scientists that EMF does create a potential health risk; and 2) there are no adopted NEPA or CEQA standards for defining health risks from EMF. However, as indicated and discussed at length in Chapter 3.13, the California Public Utilities Commission (CPUC) has undertaken an investigation to consider its role in mitigating the health effects, if any, of EMF from utility facilities and power lines, stating "at this time we are unable to determine whether there is a significant scientifically verifiable relationship between EMF exposure and negative health consequences." In addition, as also stated in Chapter 3.13, EMF levels can be reduced through shielding, field cancellation or increasing the distance from the source. The transmission lines would be approximately 135 feet high which has proven effective in reducing exposure because the reduction of the field strength drops rapidly with distance. The Project would locate the Gen-Tie lines in existing transmission corridors where possible. The Project area is predominantly undeveloped and no residences are located within approximately a quarter-mile of any Project component.

RECREATION

A004-3 The commenter notes some incorrect distances to Wilderness Areas identified in the Recreation discussion of the Draft EIS (page 3.17-5).

The requested changes have been made in the Final EIS.

A004-4 The commenter refers to a visitor survey carried out for the Park, citing the resource values for which Park patrons make recreational visits to the Park.

Data from the cited survey have been added to Section 3.14, 3.17, 4.14, and 4.17.

A004-12 The commenter states that Section 3.14.1 (Recreation) of the Draft EIS should reference the Palen/McCoy Wilderness in the discussion of the Wilderness Act of 1964.

The requested change has been incorporated into the Final EIS.

A004-28 The commenter notes an incorrect distance to JTNP in the Draft EIS.

See response to Comment A004-3.

A012-20 The commenter states that the Final EIS should include an analysis of the project's potential impact on hunting opportunities for game species within and surrounding the project.

Section 3.14.2: General Project Study Area Recreation Use describes current recreational uses of the project site. The section states "Some hiking, photography, target shooting, and limited hunting is assumed to occur in the general area, but not on the solar facility site." The project is thus not expected to disturb hunting activities or game species in the project area. Additionally, the project is within a designated Solar Energy Zone (the Riverside East SEZ) and production of solar energy at the site fits within BLM's multiple use goals for the area.

D001-7 The commenter states that there was a road in the area that was once paved and provided access to Joshua Tree National Park that has been closed in conjunction with a wilderness designation. The commenter states support for re-opening the road to make Desert Center area an access point for the Park.

Consideration of expanding Joshua Tree National Park access is outside the scope of this document, thus no changes to the document have been made.

F001-156 The commenter notes that in the "Residual Impacts and Unavoidable Adverse Effects" section of page 4.14-3, only a small number of visitors frequent the portions of JTNP surrounding the Chuckwalla Valley because (as stated in the Draft Solar Programmatic EIS and National Park Service comments on DSSF) due to lack of facilities, access, and recreational opportunities. The commenter notes that because of their isolation, activities in this portion of JTNP most likely consist primarily of overnight backcountry camping, and that backpacking overnight is the least common activity in the park: 2 percent of visitors engage in it, and 5 percent of visitors actually sleep in the backcountry.

Although few visitors make use of the portion of JTNP surrounding the Chuckwalla Valley, this may in fact work to enhance the wilderness experience available in the area and does not diminish the effects of the project on wilderness experience. No changes have been made to the document.

F001-158 The commenter states that the references to the CDCA in the second full paragraph of page 4.14-12 should be contextualized by explaining that the CDCA is a 25-million acre area of which 10-million acres are administered by BLM under the multiple-use mandate of FLPMA, rather than under the recreational limitations of wilderness and/or national park designations.

The paragraph referenced by the commenter does not refer to the CDCA, the California Desert Conservation Area, as stated by the commenter. The CDCA is accurately described by the commenter as a 25-million acre area, but the document refers to the 11-million acre California Desert District (CDD) of the BLM, referenced in the document as the "larger CDD area." The text of the paragraph focuses on the potential effects of the project in terms of lost acreage to recreation. Stating the total acreage of BLM land in the CDD area, not all of which is available for recreation, would not appropriately contextualize these effects. No changes have been made to the document.

REQUESTS FOR INFORMATION

B003-1 The commenter states that U.S. solar companies should reduce freight costs to remain economically competitive, and provides service options to this end.

Consideration of specific firms and contractors is outside the scope of the Final EIS, thus no changes to the document have been made.

E001-1 The commenter requests a CD of the DHSP Draft EIS.

The requested documents have been provided. No changes to the document have been with regard to this comment.

E002-1 The commenter requests a paper copy of the DHSP Draft EIS

The requested documents have been provided. No changes to the document have been with regard to this comment.

E003-1 The commenter requests that a copy of the Draft EIS and appendices be places in the Lake Tamarisk library, since Lake Tamarisk is the host community.

The requested documents have been provided. No changes to the document have been with regard to this comment.

E006-1 The commenter requests to be added to the DHSP mailing list and to receive a CD of the Draft EIS.

The requested documents have been provided. No changes to the document have been with regard to this comment.

SHORT TERM VS. LONG TERM PRODUCTIVITY OF THE ENVIRONMENT

F001-198 The commenter states that the third sentence of the second paragraph of page 4.23-1 states that a long-term impact of the project is "permanent" damage to desert habitats; the commenter is of the opinion that the impact is not "permanent" in the common sense of the word (as opposed to BLM's technical treatment of "temporary" impacts to desert habitat as "permanent" under NEPA terminology). The commenter states that "long term" is a more appropriate phrase that already appears in the sentence and therefore requests deletion of "permanent" from the sentence.

As noted by the commenter, "permanent" has a technical definition under NEPA, and the impacts described fit within this definition. Use of the word "permanent" specifies a type of long-term impact and is an important descriptor in the context of the section. No changes have been made to the Final EIS.

SOCIAL AND ECONOMIC

B005-1 The commenter states that the Final EIS is required to contain an economic analysis to determine how the project will affect the economics of recreation for Joshua Tree National Park.

The Final EIS analyzes potential effects to the use of Joshua Tree National Park in Section 4.14, Recreation, and notes that the project could result in "a substantial adverse effect on the wilderness experience of dispersed and occasional visitors to the Joshua Tree Wilderness Area." Based on the results of a 2010 survey, the most important concerns for park visitors would be an increase in noise levels or degradation of views, particularly of the night sky. These effects are discussed in detail in section 4.12 and 4.19 respectively. The discussion notes that the area of the park affected by the project would be very small, at less than 5 percent of the total park area. This portion of the park is infrequently visited due to the difficulty of access, and as stated "construction of the project is not expected to reduce visitation to the Joshua Tree Wilderness Area." Without more specific information regarding the distribution of park visitors and uses within the portion of the park affected by the project, a detailed economic analysis as requested is not possible. This document uses the best available information in its determination that construction of the project would not constitute a significant economic impact with respect to the park. Mitigation measures have been included to reduce potential impacts to park resources, and the BLM has worked closely with the National Park Service to ensure that these resources are fully addressed in the Final EIS.

B007-5 The commenter states that the document must consider the full economic and environmental impacts of the DHSP in comparison to distributed energy, including costs of construction, maintenance, decommissioning, and restoration; and cost of a performance and guarantee bond to ensure that the project performs as proposed and that funds for are available damage reimbursement for health effects from dust, groundwater depletion, damage from increased dust storms, damage to crops, effects on livestock and grazing, and reduced income resulting from reduced tourism.

See responses to Comments B007-2 and B007-3.

B008-16 The commenter states that housing in the project area is inadequate to support the required construction workforce, which outnumbers local residents, and requests additional information about worker housing, commuting, and parking for the project. The commenter states that long distance commuting could represent a major increase in GHG emissions, potentially offsetting the reductions provided by the project's renewable energy.

As described in Section 4.15.6: Changes to Local Employment and Labor Force, the workforce for the project will be recruited from Riverside and neighboring San Bernardino Counties. In-migration of the construction workforce could be accommodated within the available hotel rooms and housing vacancies in the nearby cities of Blythe and Indio; because of this availability of nearby housing, few, if any, workers are expected to relocate to the project area permanently for construction. The Section also states that the majority of these temporarily relocated workers likely would commute on a daily basis between home and the project study area. It is unlikely that they would relocate their families for the duration of construction. Section 2.5.5 states that the a parking area will be part of the construction plan, and additional details regarding expected traffic and commute volume are provided in Section 4.18 and Appendix H: Traffic Study. Analysis in Section 4.18 shows that even if all construction workers commuted during peak hours, resulting delays would be less than one second (Section 4.18.6 and Table 4.18-2). Regarding climate change, Section 4.5.6 includes an analysis of the contribution of on-road vehicles, including commuting construction workers, to GHG emissions (Section 4.5.6 and Table 4.5-1). Even in consideration of these emissions, the section concludes that the GHG emission reductions achieved by the project would greatly outstrip the emissions required for construction, maintenance, and decommissioning.

B008-17 The commenter states that the construction workforce could impact effective law enforcement, as the nearest Sheriff station is 50 miles from the project area. The commenter states that the area could become a haven for illegal activity and would have an economic impact to commuting law enforcement. The commenter states that there are inadequate medical facilities in case of a serious accident. The commenter states that illegal off-roading, including in wilderness areas, could become a serious problem, affecting special designations and wildlife. The commenter inquires whether employees will be educated on off-roading issues.

The commenter is concerned about impacts to law enforcement with the influx of construction workers. Construction activities would be temporary. As discussed in Section 4.15.6: Quality of Life, the majority of construction workers for the project would be expected to commute daily to the site from neighboring communities. Because most workers would travel to the site from their homes, local residents may have little daily interaction with the workers, and the workers are unlikely to result in law enforcement problems or result in an increase in the use of existing infrastructure and are not expected to be a significant impact to law enforcement resources. Given the limited number of construction workers expected to stay in the local area during the work week, the presence of these individuals would not be expected to result in substantial or long-term adverse effects to the local area's social composition and character. Further, workers would go through extensive training to minimize impacts to the local wilderness areas from illegal off-road travel. With regard to law enforcement surrounding the project site, on-site security, including fencing, lighting, motion detectors, and cameras in key locations would minimize increased demand on law enforcement.

B010-2 The commenter states that the project could shade the adjacent Desert Sunlight panels.

A discussion of panel shading and mitigation measure to ensure no adjacent panel shading have been added to Section 4.11 of the Final EIS.

B011-8 The commenter states that the EIS fails to address how utility bills of ratepayers would be affected by the project, stating that there is growing evidence that the cost of mandating renewable energy sources and providing transmission may outweigh environmental benefits, electricity prices, and reduce jobs.

The purpose of the EIS is not to evaluate the economic merits of the state and federal renewable energy policies and objectives, but rather to evaluate the environmental effects of the proposed project and viable alternatives to the project. It is not possible to ascribe a particular economic effect to individual ratepayers in the region as a result of the DHSP. Electric utility rates are regulated by the CPUC, and power purchase agreements are approved by the CPUC — these agreements are confidential. The project does not yet have a power purchase agreement. Furthermore, the project is proposed to use existing and approved transmission facilities, thereby minimizing effects related to new transmission infrastructure.

D001-6 The commenter states that he supports timely approval of the project because of the importance of jobs to the Desert Center area and its residents.

The decision maker will consider all public comments when making a final decision.

D002-2 The commenter provides some history of Joshua Tree National Park, and cites an economic study prepared by Professor Daniel Stein of Michigan State University which found that visitors to the Park contributed $64 million to gateway communities and communities within a 30-mile radius of the Park, and the most recent visitor use survey of the Park.

With regard to the visitor use survey, please see response to Comment A004-4. With regard to an economic study, please see response to Comment B005-1.

SOILS AND GEOLOGY

F001-144 The commenter requests deletion of AM GEO-1 on page 4.9-1 (and throughout the document) and its replacement with the following language: "Design Plan. Project structures shall be built in accordance with the design-basis recommendations in the project-specific geotechnical investigation report. Structure designs must meet the requirements of all applicable federal, state, and county permits and building codes."

The requested changes have been made in the Final EIS.

SOLID AND HAZARDOUS WASTES

A002-1 Please see DTSC's scoping letter comments, dated October 20, 2011, in Appendix B.

1. The commenter states that the EIS should evaluate whether conditions within the Project area may pose a threat to human health or the environment. The commenter provides databases of some of the regulatory agencies.

2. The commenter states that the EIS should identify the mechanism to initiate any required investigation and/or remediation for any site within the proposed Project area that may be contaminated, and the government agency to provide appropriate regulatory oversight. If necessary, the Department of Toxic Substances Control (DTSC) states that it would require an oversight agreement in order to review such documents.

3. The commenter states that any environmental investigations, sampling and/or remediation for a site should be conducted under a Workplan approved and overseen by a regulatory agency that has jurisdiction to oversee hazardous substance cleanup. DTSC states that the findings of any investigations, including any Phase I or II Environmental Site Assessment Investigations should be summarized in the document and that all sampling results in which hazardous substances were found above regulatory standards should be clearly summarized in a table. DTSC states that all closure, certification or remediation approval reports by regulatory agencies should be included in the EIS.

4. The commenter states that if buildings, other structures, asphalt or concrete-paved surface areas are being planned to be demolished, an investigation should be conducted for the presence of hazardous chemicals, mercury, and asbestos paints (LPB) or products, mercury or ACMs are identified, proper precautions should be taken during demolition activities. Additionally, DTSC states that the contaminants should be remediated in compliance with California environmental regulations and policies.

5. The commenter states that future project construction may require soil excavation or filling in certain areas and that sampling may be required. DTSC states that if soil is contaminated, it must be properly disposed and not simply placed in another location onsite. DTSC states that Land Disposal Restrictions (LDRs) may be applicable to such soils, and that if the project proposes to import soil to backfill the areas excavated, sampling should be conducted to ensure that the imported soil is free of contamination.

6. The commenter states that human health and the environment of sensitive receptors should be protected during any construction or demolition activities and that if necessary, a health risk assessment overseen and approved by the appropriate government agency should be conducted by a qualified health risk assessor to determine if there are, have been, or will be, any releases of hazardous materials that may pose a risk to human health or the environment.

7. The commenter states that if the site was used for agricultural, livestock or related activities, onsite soils and groundwater might contain pesticides, agricultural chemical, organic waste or other related residue. DTSC states that proper investigation, and remedial actions, if necessary, should be conducted under the oversight of and approved by a government agency at the site prior to construction of the project.

8. The commenter states that if it is determined that hazardous wastes are, or will be, generated by the proposed operations, the wastes must be managed in

accordance with the California Hazardous Waste Control Law (California Health and Safety Code, Division 20, Chapter 6.5) and the Hazardous Waste control Regulations (California Code of Regulations, Title 22, Division 4.5). DTSC states that if it is determined that hazardous wastes will be generated, the facility should also obtain a United States EPA Identification Number and that certain hazardous waste treatment processes of hazardous materials, handling, storage or uses may require authorization from the local Certified Unified Program Agency (CUPA).

1. As stated in Section 3.13.2, Database Review, "A hazardous materials storage and contaminated sites database search was conducted for the project study area in 2010 as a part of the EIS for the DSSF project, located immediately adjacent to the DHSP and within the proposed project study area." This section summarizes the results of this review, which includes a search of the databases listed in the scoping comment and a field visit as a part of a Phase 1 Environmental Site Assessment. Page 4.13-5, under "Existing Contamination," further states that "Alternative 4 would not mobilize existing contaminants in groundwater or soil, or expose workers to contaminated or hazardous materials at levels in excess of those permitted by federal and state law. There are no known previously contaminated sites of concern located in the project study area." Other alternatives would have similar or reduced effects. CEQA criterion H-4 asks whether the project "Is located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (i.e., the Cortese List) that would create a significant hazard to the public or environment?" Page 4.13-22 states "With regard to Criterion H-4, based on the Phase I Environmental Site Assessment (ESA) conducted for the DSSF project, the DHSP site and the gen-tie line routes do not contain any hazardous materials sites pursuant to Government Code Section 65962.5. Therefore, the project would have no impact related to Significance Criterion H-4. With the adoption of Applicant Proposed Measures and Mitigation Measures described in Section 4.13, Public Health and Safety, conditions at the Project area would not pose a threat to human health or the environment through hazardous wastes.

2. Section 3.13.1, Applicable Plans, Policies, and Regulations, describes the federal, state, and local laws by which the project would abide and the agencies administering these laws (3.13-1 through 3.13-3), which includes provisions for responding to spills and remediation. The EIS describes several mitigation measures that address hazardous material spills, discovery, and emergency response. MM PHS-1 requires development of a hazardous materials management plan, which includes an emergency response contingency plan. MM PHS-2 requires the implementation of BMPs for hazardous materials, including routine inspections, maintenance, and training. MM PHS-3 requires a Spill Prevention Control and Countermeasures Plan that "identifies primary and secondary containment for oil products and other hazardous materials stored on site as well as training in spill management in the event of an unexpected release." Pages 4.13-9 through 4.13-10 specify response procedures in this plan. MM PHS-4 Requires an Environmental Health and Safety Plan, including spill containment, decontamination,

and emergency response. This plan also "ensures [that the project] includes all activities and compliance with all local, state and federal regulatory requirements." MM PHS-5 requires a more detailed project-specific Emergency Response and Inventory Plan.

3. Section 3.13.1, Applicable Plans, Policies, and Regulations, describes the federal, state, and local laws by which the project would abide and the agencies administering these laws (3.13-1 through 3.13-3). Mitigation Measures PHS-1 through PHS-5 provide additional detail on investigation, sampling, and cleanup related to hazardous materials. A Phase I Environmental Site Assessment was conducted for the project area in 2010 for the Desert Sunlight Solar Farm. The results of this Assessment as related to Desert Harvest Solar Project are summarized in Section 4.13.6 under "Existing Contamination" (4.13-5). The section states that "There are no known previously contaminated sites of concern located in the project study area." Neither a Phase II nor site sampling are warranted. The site has not been contaminated, so closure, certification, and remediation approval reports are not applicable. The site is a greenfield site.

4. No buildings, other structures, asphalt or concrete-paved surface areas would be demolished as a part of the proposed project. The project is on an undeveloped, greenfield site.

5. Section 2.5.4 describes that only clean fill or native soil would be used to backfill excavations. Section 4.13.6, Existing Contamination states "Alternative 4 would not mobilize existing contaminants in groundwater or soil, or expose workers to contaminated or hazardous materials at levels in excess of those permitted by federal and state law" (page 4.13-5). Other alternatives would have similar or reduced effects. Section 4.13.16 also states that "Any previously unknown contaminated soils that may be encountered would be treated and disposed of in accordance with applicable regulations" (page 4.13-21). As stated in Section 4.13.6, Hazardous Materials, "the project operator would be required to strictly adhere to all relevant regulations regarding handling hazardous or potentially hazardous materials. In addition, MM PHS-6 (proper disposal or recycling of PV panels and other infrastructure) would ensure that project components are disposed of in a manner that does not pose risks to human health or the environment" (pages 4.13-4 through 4.13-5). Mitigation Measure PHS-3 states that "The site superintendent shall perform routine inspections to ensure that all materials onsite are being stored and disposed of in an appropriate fashion" (page 4.13-9). Section 2.5.4 states that the project will require soil backfill, and will use clean fill from native soils. This section also states that "Gravel would be required for the north-south access roads (not for the less often used east-west routes) within the project area and would be sifted from on-site soil or trucked to the site from a BLM-approved commercial mine located 6 miles from the project site" (page 4.13-16).

6. According to the 2010 database review and Phase I ESA covering the project area (conducted for DSSF), the project "would not mobilize existing contaminants in groundwater or soil, or expose workers to contaminated or hazardous materials

at levels in excess of those permitted by federal and state law. There are no known previously contaminated sites of concern located in the project study area" (page 4.13-5). However, construction of the project would require the use, storage, and disposal of some hazardous and potentially hazardous materials, such as those shown in Table 4.13-1. Additionally, the DHSP may use a variety of PV technologies, including copper indium gallium cyanide panels, which are manufactured using the toxic elemental metal cadmium. The risks and impacts from these hazardous materials are fully analyzed in Section 4.13. Mitigation measures are provided to ensure that effects to the environment and sensitive receptors will be less than significant. A health risk assessment is not warranted.

As described in Section 4.13.6, the entire Chuckwalla Valley area was historically used as a military training facility, and there is potential for munitions and explosives of concern (MEC) to be present on portions of the site. Project construction personnel could sustain injuries if MECs were encountered on the project site during construction. Mitigation Measure PHS-8 (munitions plan) would reduce impacts from personnel encountering MEC during construction by requiring the Applicant to gather available information on potential onsite MECs and ensuring that all construction workers receive MEC-related safety training.

7. The site has not been used for agricultural, livestock, or related activities. A database review and Phase I ESA for the area conducted in 2010 for the Desert Sunlight Solar Farm show no evidence of pesticides, agricultural chemical, organic waste or other related residue.

8. Section 3.21.1, Applicable Plans, Policies, and Regulations, describes the California Hazardous Waste Control Law and Title 22 of the California Code of Regulations. Section 3.13.1, Applicable Plans, Policies, and Regulations, discusses both the California Hazardous Waste Control Law, as administered by the DTSC (page 3.13-2), as well as Riverside County Department of Environmental Health's responsibility as the local CUPA for the Project Area (page 3.13-3, 3.13-5). Mitigation Measures, particularly MM PHS-4, require compliance with applicable state, federal, and local regulations.

A002-2 DTSC can provide cleanup oversight through an Environmental Oversight Agreement (EOA) for government agencies that are not responsible parties, or a Voluntary Cleanup Agreement (VCA) for private parties.

The site is not a brownfield site and does not require and EOA or VCA.

A011-1 The commenter states that Section ES.2 references a unified program facility permit, and recommends revisions to the EIS to clarify Riverside County requirements.

The requested revisions have been incorporated into the Final EIS.

SPECIAL DESIGNATIONS

A004-1 The commenter believes that the Draft EIS fails to adequately analyze some foreseeable environmental consequences and cumulative impacts of the proposed project on the resources and values of Joshua Tree National Park.

The National Park Service – Joshua Tree National Park is a cooperating agency for preparation of the EIS, and BLM has made every effort to incorporate the Park's concerns. To this end, two additional time-lapse visual simulations have been added for the Final EIS to simulate visual conditions within the Park after construction of the project. In addition, the discussion of dark skies within the Park has been supplemented. Please refer to changes in Sections 3.17, 3.19 4.17, and 4.19, and the new Appendix G5 in this Final EIS.

A004-2 The commenter states that the Draft EIS is unclear about the type of technology that will be erected and how tracking technology will effect visual resources in the Park. In addition, the commenter states that visual resources, natural sounds, night skies, and effects on Wilderness are understated in the Draft EIS.

Discussions of ambient noise conditions within the Park have been added to Sections 3.12 and 4.12 in the Final EIS. Park thresholds for air quality and nighttime darkness have been included in Sections 4.2 and 4.19, respectively. In addition, mitigation measures have been clarified to ensure that project effects will not contribute to net reduction in air quality, quietness, or nighttime darkness within the Park boundaries.

A004-13 The commenter states that Section 3.17 (Special Designations) of the Draft EIS should include a map showing the proximity of all Wilderness Areas to the project site. The commenter also requests that the first paragraph under the Wilderness section (page 3.17-5) should reflect the Big Wash Trail, which is located 8.5 miles west of the project site.

The requested change has been incorporated into the Final EIS.

B008-23 The commenter provides history on JTNP and describes its economic benefits in the region. The commenter states that the project would be constructed very close to JTNP and that the industrial cumulative impacts of major solar projects in the area could permanently change the character of the park and impact tourism potential. The commenter cites the JTNP General Management Plan regarding potential impacts from development adjacent to the park.

Sections 4.14 (Recreation) and 4.17 (Special Designations) describe impacts of the Project on Joshua Tree National Park, some of which cannot be mitigated to less-than-significant levels. The portion of the park that would be affected by the project would be very small, however, and is infrequently visited; thus the solar project is unlikely to change the overall character of the park or visitor volume. The BLM has worked closely with JTNP and with the NPS as a cooperating agency to avoid and minimize impacts to the park.

B009-4 The commenter suggests that Alternative 5, which excludes the 47-acre portion of the project site within the Palen-Ford WHMA does not provide enough mitigation, and recommends that habitat compensation be replaced at a ratio of 3:1.

Section 4.17.6, Special Designations: Direct Effects of Construction, describes the reduced functionality of the 47-acre portion of the Palen-Ford WHMA. While this area still enjoys a protected designation, the value of the habitat present determines the compensatory mitigation ratio, as described in MM VEG-6. The area does not protect key WHMA resources, such as dune or dry lake habitat, and is disconnected from important habitats that exist east of the project. Special status plants and wildlife, such as the Mojave fringe-toed lizard protected elsewhere in the WHMA, are not found in the area. Impacts to the area would be further reduced through implementation of mitigation measures VEG-1 through VEG-10. In general, while the project affects the mapped boundary of the WHMA, it would not affect the key species and habitats of the WHMA, and so a higher compensation ratio than what is currently described is not required in the Final EIS.

F001-161 The commenter states that the second sentence of the direct effects analysis of Alternative 4 incorrectly states that 78.5 acres of CDFG jurisdictional streambeds and 976.5 acres of Creosote Bush Scrub habitat lie within the Palen-Ford WHMA portion of the proposed project. The commenter states that the impact totals above are for the entire proposed project, of which only 47 acres lie within the Palen-Ford WHMA. The commenter requests that BLM revise these figures and the remainder of the direct effects analysis to reflect that, while the proposed project may affect the map depicting the Palen-Ford WHMA boundary, the proposed project does not affect the resources the Palen-Ford WHMA was created to protect.

The acreages of impact have been updated in the Final EIS. Regarding the resources the Palen-Ford WHMA was established to protect, see response to Comment F001-112; the commenter's recommendations have been partially incorporated into the document.

F001-162 The commenter requests that the direct effects analysis under Operations and Maintenance on page 4.17-3 be conformed to the conclusion of the Draft EIS that the proposed project would not be visible from the Desert Lily Preserve ACEC as illustrated in Figure 4.19-4B.

The Direct Effects section starting on page 4.17-3 and continuing to page 4.17-4 has been changed to remove the reference to the Desert Lily Preserve ACEC.

F001-163 The commenter requests that BLM explain in the cumulative effects analysis on page 4.17-32 that the proposed project's incremental contribution to effects on the Palen-Ford WHMA are insubstantial because of the severance of the DHSP portion as a result of construction of the Desert Sunlight project immediately to the north and because, while the proposed project may affect the map depicting the Palen-Ford WHMA boundary, the proposed project does not affect the resources the Palen-Ford WHMA was created to protect.

In Sections 4.17.11 through 4.17.14, the Final EIS describes the impacts of Alternatives B through E. These gen-tie line alternatives have potential impacts to the Palen-Ford WHMA that are not related to the direct impacts of Solar Facility Alternatives 4, 6, and 7 referenced in the comment. In describing cumulative effects in section 4.17.16, the document analyzes Alternatives 4 through 7 and C through E together, rather than individually. The commenter's requested changes only refer to effects of Solar Facility Alternatives 4, 6, and 7, not the impacts of Alternatives C through E, to the Palen-Ford WHMA. Because Alternatives C through E have potential effects that are not considered in the comment, and because the requested changes have been addressed in specific Alternatives sections, no changes have been made to the document.

F001-164 The commenter requests that BLM conform the conclusions of the first paragraph of the "Residual Impacts and Unavoidable Adverse Effects" paragraph on page 4.17-6 with comments F001-112 and F001-90, which demonstrate why there are no residual impacts and unavoidable adverse effects with regard to the resources they discuss. The commenter states that the project does not directly impact vegetation resources within the Desert Lily ACEC.

The commenter's recommendations have been partially incorporated into the Final EIS. See response to Comment F001-112 regarding the Palen-Ford WHMA. Impacts to the Palen-Ford WHMA are considered in detail in Section 4.17.6: Construction and summarized in Section 4.17.6: Residual Impacts and Unavoidable Adverse Effects." The relevant text related to Comment F001-90 has been incorporated into the document. Sections 4.17.1: Methodology for Analysis and 4.17.6: Direct Effects of Construction describe direct effects of the project on the Desert Lily ACEC.

F001-168 With regard to the Draft EIS' analyses of indirect and cumulative effects on recreational values at JTNP on pages 4.17-26 and 27, the commenter requests that BLM refer to the Applicant's Comment F1-156, above.

See response to Comment F001-156.

F001-206 The commenter states that the "Special Designations" row of Table 4.24-2 states that there are no significant and unavoidable impacts. The commenter states that the Special Designations Section is largely a conglomerate of other environmental disciplines studied in the Draft EIS and thus suggests stating that there are no significant and unavoidable impacts separate from those identified among the other environmental disciplines considered in the Draft EIS.

The requested changes have been incorporated into the Final EIS.

TRANSPORTATION AND PUBLIC ACCESS

A005-1 The commenter notes that one of the assumptions made in the traffic study was that deliveries from large trucks would typically occur during off-peak hours. The commenter states that the only heavy vehicles included in the trip generation analysis were concrete truck mixers which would arrive and depart during all periods of the day. The commenter states that if this is to be true, the approval of the project permit should include provisions which require deliveries from large/heavy vehicles, except concrete truck mixers, to be made during off-peak periods.

The Traffic Study, included in Appendix H in the Final EIS, states that "Even though there may be several deliveries of materials a day for most of the construction period, most [heavy] vehicles are not expected to move during the peak traffic periods. The only exception to this norm will be when concrete is being poured." Since the trip generation analysis only considers peak period trips, concrete mixers are included in this analysis, conservatively estimating that 1/3 of daily deliveries would be concrete deliveries in the AM peak period, when temperatures are cool enough to accommodate concrete pouring. The impacts of heavy vehicle trips during peak hours are thus fully described and examined in the Traffic Study. The commenter's recommendation that large/heavy vehicles, except concrete truck mixers, make deliveries outside peak hours is currently an assumption of the project. Recommending project permit provisions is outside the scope of this document, and the decision-maker will consider all comments.

A005-2 The commenter recommends that traffic counts not be conducted during atypical traffic conditions, noting that in this case counts were conducted during the week which included Thanksgiving holiday. The commenter further requests that the raw count sheets be included in the EIS.

The raw traffic count sheets are presented beginning on page 36 of Appendix H in the Draft EIS. The traffic counts conducted during a week containing a holiday for DHSP show effectively no difference compared with the traffic counts performed for the Desert Sunlight Project Traffic Analysis (DSSF Final EIS Appendix I). This is seen as substantial evidence that the holiday week had no effect on the traffic or the traffic analysis presented in the Draft EIS.

B006-8 The commenter claims that the Draft EIS does not consider whether and how new access roads created for the project may increase off-road vehicle use in the area and the consequent impacts on habitats and species.

Access roads for the solar facility are proposed to be entirely on site within the proposed fenceline. These access roads would not be accessible to the public and would not increase off-highway vehicle (OHV) use.

B011-12 The commenter states that the EIS fails to consider the indirect impacts of new roads.

See response to Comment B006-8.

F001-169 The commenter states that the first sentence of the first paragraph following Table 4.18-2 on page 4.18-5 incorrectly states that MM WAT-2 would require transportation of water needed for Alternative 4 by truck. The commenter states that as drafted, MM WAT-2 requires identification of an alternate water source prior to construction.

The section has been revised to reflect changes to MM WAT-2. The commenter's specific language recommendations no longer apply to the revised text of MM WAT-2.

F001-170 The commenter requests that BLM correct the sentence immediately preceding the "CEQA Significance Determination" section of page 4.18-22, as follows: "The proposed project and alternatives would not include a design feature or incompatible uses that would result in an increase in hazards; therefore, there would be no impact."

The requested changes have been made to the Final EIS.

VISUAL RESOURCES

A004-5 The commenter states the Park's concern for the visual contrast between the Desert Sunlight Solar Farm Project and the Desert Harvest Solar Project from within the Park, particularly with the use of high-profile tracking panels by the DHSP.

Two time-lapse visual simulations have been added to simulate the contrast between the two projects in Appendix G5 of this Final EIS. As is demonstrated in the simulations, the height and articulation of the panels is barely discernible in the background distance from vantage-points within the Park. While the Desert Sunlight Solar Project can be seen to have fairly high contrast and glare, the Desert Harvest Solar Project effectively blends into the natural environment, resulting in little to no contrast. Please refer to the additional analysis presented in Section 4.19.

A004-6 The commenter states support for any alternative that is less visually intrusive, particularly low-profile panels.

As is demonstrated by the time-lapse visual simulations (Appendix G-5) from vantagepoints within the Park, high-profile tracking panels present very little visual contrast. Although the high profile solar panels would increase the visibility and visual contrast of the development area when viewed from foreground viewing opportunities, the solar field would have visual characteristics similar to the low profile arrays when viewed from more distant vantage points including Joshua Tree National Park. The decision-maker will consider all comments and alternative preferences when making a decision on the project.

A004-7 The commenter notes that the project would be located in an area with high night sky quality, and requests that night sky conditions be maintained at the current natural ambient level.

Mitigation Measure MM VR-6, as presented in Section 4.19 of the Draft EIS (pages 4.19-18 and 4.19-19) includes stringent requirements and performance standards to ensure that project lighting is not perceptible within the Park boundary.

A004-8 The commenter states that best management practices related to night sky in Table 2.5 (Applicant Measures) are omitted from this table. The commenter further states that the Final EIS should include mitigation or Applicant Measures that require "full cut-off luminaries," because the words "shielded" and "full cut-off" are erroneously used interchangeably. The commenter requests that this wording should be changed in the Site Security, Fencing, and Lighting section of Chapter 2.5.4 of the Draft EIS (page 2-9).

Table 2.5 in the Draft EIS (pages 2-20 through 2-24) lists only the measures proposed by the project Applicant. No changes to this table have been made, as the project Applicant has not proposed best management practices related to night skies. In addition, the reference to the proposed lighting plan has not been changed in Section 2.5.4, because this section describes the proposal by the Applicant, which BLM has no authority to modify. Please note that Mitigation Measure MM VR-6 (Night Lighting Control) (Draft EIS page 4.19-18) requires that only a "fully shielded, full cutoff light fixture" be used at the facility, in addition to numerous other requirements to maintain dark skies. No changes to the Draft EIS are warranted based on this comment.

A004-9 The commenter states that limited nighttime construction activity should be included as an Applicant Measure, such that white lighting (e.g., metal halide) lights are only used when necessary for work tasks, and should not be used for general security of dusk-to-dawn lighting. The commenter states that these lights should be less than 3500 Kelvin color temperature (warm white) to reduce impacts.

Table 2.5 in the Draft EIS (pages 2-20 through 2-24) lists only the measures proposed by the project Applicant. No changes to this table have been made, as the project Applicant has not proposed measures related to night skies. MM VR-6 requires mitigation to reduce impacts from night lighting addressing the commenter's recommendations.

A004-14 The commenter requests the addition of a KOP from which a visual analysis of the newly proposed "tracking system technology" can be modeled from, and provides coordinates and access directions for the proposed KOP, which serves as an easy ingress/egress staging area for night sky activity in JTNP.

As requested by the commenter, a time-lapse visual simulation at the newly recommended KOP has been included in the Final EIS. This time-lapse visual simulation and two others are presented in Appendix G-5 of the Final EIS. As shown in the simulation, the Desert Harvest panels track the sun throughout the day and there is no noticeable glare or glint off the panels that is visible from KOP 9. During the morning hours, the brighter band of color that creates a "lake effect" and the relatively brief episode of reflected sun that does occur (approximately 26 seconds into the video) is actually from the adjacent Desert Sunlight fixed tilt solar panels. Up until just before midday, the view from KOP 9 is capturing the backside of the Desert Harvest tracking panels, which is why they appear darker relative to the Desert Sunlight solar field. At approximately mid-day, the Desert Harvest panels are in an approximate horizontal position and the sun has already reached its position due south (to the right out of the field of view). In the afternoon and evening when the front of the Desert Harvest solar panels would be visible from KOP 9, the panels are essentially reflecting the color hues of the background mountains and sky. What the time-lapse simulation shows is that the Desert Harvest tracking panels would exhibit minimal to no perceptible glare or glint as viewed from KOP 9.

A004-15 The commenter states that the affected visual environment analysis process does not mention the impact of light pollution (glare and skyglow). The commenter further states that the omission of dark night skies and the impacts associated with light pollution understates the value of this critical resource; and the commenter recommends that a section relating to night sky be included in the Affected Environment section for Visual Resources. The commenter states that data taken from Pinto Wells, located 7 miles north of the project site in the Park, is monitored by the NPS and is measured as the darkest area of the Park.

A discussion of glare and skyglow has been included in the Final EIS in Section 4.19.

A004-16 The commenter states that Section 4.2.3 (page 4.2-6) addresses night sky visibility and notes that dust would not be present at night; the commenter recommends that this section also address impairment of night sky visibility due to light pollution during construction and operation activities.

Section 4.2.3 is focused particularly on Air Resources. Impacts to night sky visibility from light pollution are addressed in Section 4.19. No changes to the EIS are warranted as a result of this comment.

A004-22 The commenter notes that the project is located in an area of night sky quality and requests that night sky conditions be maintained, requesting specific revisions to the Draft EIS.

See responses to Comments A004-8 and A004-9.

A004-23 The commenter requests revising Applicant Measures as presented in the Draft EIS.

See responses to Comments A004-8 and A004-9.

A004-31 The commenter states that the affected visual environment does not include a discussion of light pollution (glare and skyglow).

See response to Comment A004-15.

A004-32 The commenter requests a revision related to night sky visibility impairment from light pollution during construction and operation.

See response to Comment A004-16.

B008-15 The commenter states that the visual impacts of the proposed project will be severe to the project area and surrounding special designations. The commenter requests underground transmission lines to reduce visual and other impacts, as Desert Sunlight has agreed to do.

Regarding visual impacts to Joshua Tree, Section 4.19.6: Effects Context for Joshua Tree Wilderness and National Park discusses the potential visual impacts and mitigation measures, including impacts to the park. As described in this section, a very small percentage of the park viewshed would be affected by the project. Simulations from KOPs within JTNP and mitigation measures have been included to ensure that impacts to the park are avoided or minimized, and BLM has worked closely with JTNP staff to further minimize impacts to park visual resources and wilderness experience. Regarding underground transmission lines, Section 2.17.8 discusses undergrounding the gen-tie line as a project alternative. This alternative was ultimately eliminated from detailed consideration because "While underground lines would reduce the visual effects of the transmission lines, they have several disadvantages with respect to the environmental impacts that would occur during construction." Additionally, the cost of undergrounding would be economically infeasible, undergrounding would limit interconnection with future circuits, and maintenance would be much more challenging. The section concludes that undergrounding would thus not be a feasible project alternative, and that the additional impacts could outweigh the benefits to visual resources.

B008-24 The commenter states that the project area possesses notable, though sensitive, night sky quality. The commenter states that the Draft EIS does not adequately describe the affected environment or potential impacts to this resource and should include appropriate mitigation measures, including an Outdoor Lighting Plan (as required for Desert Sunlight). The commenter states that outdoor lighting should be located only at offices, lighting should not exceed 2700 Kelvin color temperature (warm white), no continuous roadway lighting should be installed, no vehicles should use strobe lights or high beams, and white lighting (metal halide) should only be used temporarily when required by work and not for general security or dusk-to-dawn lighting. The commenter states that the project should be denied, but recommends a series of mitigation measures if approved.

KOP 1/1A was established in the Joshua Tree Wilderness; its location was in part determined by the area's popularity among night sky enthusiasts (Section 3.19.2: KOP 1 and 1A). Section 3.19.2: Regional Setting states that "One of the attractions for residents in less developed areas of the county is the brilliance of the nighttime sky on clear nights, unencumbered by lighting scattered over a large urban area." Section 4.19 of the Final EIS describes visual impacts, including those to night skies. Section 4.19.6: Effects Context for Joshua Tree Wilderness and National Park further describes the importance of night skies to JTNP and surrounding communities. Mitigation Measure VR-6 requires specific actions to minimize the impact of the project on night skies, including a Night Lighting Management Plan, as requested by the commenter. Other measures include a cap on Kelvin color temperature of night lights (3500, which represents warm white), limitations on lighting locations, coordination of night work with JTNP, use of metal halide lighting only when required for work, and numerous other actions to minimize impacts to night skies.

F001-6 The commenter states that Significance Criterion V-5 for Visual Resources should be stricken from Table ES-1 and Table 4.24-2, because, as noted in the Draft EIS [Draft EIS at page 4.19-44], "The low-to-high degrees of visual change that would be caused by Alternative 4 would be allowed under the applicable Interim Visual Resource Management (VRM) Class IV management objective.... Therefore, the resulting visual impact would be less than significant under this criterion."

The requested changes have been made in the Final EIS.

F001-24 The commenter states that the values shown in Table 2-13 for visual effects do not reflect the conclusions drawn in Tables 2-11 and 2-12 and consequently overstate the visual impacts of Alternative 7. The Applicant recommends specific revisions to conform Table 2-13 to Tables 2-11 and 2-12 and to be consistent with conclusions in the Draft EIS.

The numeric codes in Table 2-13 do not indicate severity of impacts on an absolute scale, but are rather used as a relative means of comparing impacts within each row. The table notes at the bottom of the table have been updated to clarify this point in the Final EIS. Factors that contribute to the ranking of alternative configurations (solar array and transmission line) include (a) visibility of the solar field, which is affected by panel height; (b) addition and visibility of a new transmission line; and (c) the proliferation of facilities across the landscape, which contributes to heightened perceptions of industrialization of a predominantly natural appearing landscape. Combining these various factors to determine the least and most visually impacting development scenarios leads to the following revised ranking of alternative configurations, which have been incorporated into Table 2-13 in Section 2. Rank 1: 6B. Configuration 6B was ranked first and preferred overall because it incorporates the lower height/lower visibility (low profile) solar panels in a reduced development footprint that would reduce visual impacts on viewers in the immediate project vicinity and specifically Kaiser Road in the vicinity of the development area. This configuration also would co-locate transmission conductors on the existing Desert Sunlight transmission structures, which would mean that construction of an additional transmission line would be avoided. Rank 2: 4B/5B. Configurations 4B and 5B would utilize the lower profile/visibility solar panels similar to 6B but with a slightly larger solar development area (footprint). These configurations would also include the co-location of transmission conductors with Desert Sunlight. Because of the slightly larger solar footprint, these configurations are less preferable to Configuration 6B.

Rank 3: 7B. Configuration 7B would utilize the more visible high profile solar panels, which would increase the visibility and visual contrast of the development area when viewed from foreground viewing opportunities, predominantly along Kaiser Road in the immediate project vicinity. Although the solar field would be more visible from foreground viewing locations, it would have visual characteristics similar to the low profile arrays when viewed from more distant vantage points including Lake Tamarisk, Desert Center, State Highway (SR) 177, I-10, and Joshua Tree National Park. 7B would also include the co-location of transmission conductors with Desert Sunlight. However, due to the more visible solar arrays, 7B is less preferable to 6B, 4B, or 5B. Rank 4: 6C. Configuration 6C incorporates the lower profile solar panels, with a reduced solar development footprint, but with a second transmission line parallel to the Desert Sunlight transmission line. While this transmission line configuration is less desirable than co-location of conductors on a single set of transmission line structures (it is less preferable 5 than any of the "B" configurations), it is preferable to locating the second transmission line in a different right-of-way that results in the proliferation of multiple, distinct lines across the landscape.

Rank 5: 4C/5C. Similar to Configuration 6C, Configurations 4C and 5C would also incorporate the lower profile solar panels and install a second parallel transmission line in a single corridor but with slightly larger solar development footprints. Thus, they are slightly less preferable to Configuration 6C. Rank 6: 7C. Similar to Configurations 4C and 5C, Configuration 7C would have the slightly larger solar development footprint, and it would also install a second parallel transmission line in a single corridor. However, 7C would incorporate the taller solar panels, which would be more visible to foreground viewers. Thus, Configuration 7C is less preferable to Configurations 4C and 5C.

Rank 7: 6D. Although Configuration 6D would utilize the lower profile solar panels with a reduced development footprint, the Gen-Tie D transmission line route would result in the location of the second transmission line in a separate corridor that would contribute to the proliferation of industrial facilities and character across the landscape that would also be prominently visible from I-10. Therefore, Configuration 6D is less preferable than 7C. Rank 8: 4D/5D. Similar to Configuration 6D, Configurations 4D and 5D would also incorporate the lower profile solar panels and install a second transmission line in a separate transmission corridor. However, 4D and 5D would have slightly larger solar development footprints. Therefore, they are slightly less preferable to Configuration 6D.

Rank 9: 6E. Configuration 6E would utilize the lower profile solar panels with a reduced development footprint and a separate transmission line corridor. However, the Gen-Tie "E" transmission line route would follow an even more circuitous path through the valley, resulting in a longer line with more structures and greater associated visual impact. Therefore, Configuration 6E is less preferable to Configurations 4D and 5D. Rank 10: 4E/5E. Similar to Configuration 6E, Configurations 4E and 5E would utilize the lower profile solar panels and the more circuitous and visually impacting Gen-Tie E transmission line route. However, 4E and 5E would also have slightly larger solar development footprints. Therefore, Configurations 4E and 5E are less preferable than Configuration 6E.

Rank 11: 7D. Configuration 7D would have a solar development footprint similar to 4D/E and 5D/E and would utilize the separate Gen-Tie D transmission line route. However, 7D would also require the high profile solar panels, which would be more visually impacting in foreground views. Therefore, although 7D would utilize the more preferable Gen-Tie D transmission route (compared to the E route), it would also utilize the higher profile and more visually impacting solar panels, which would slightly more than offset the visual preference of the D route over the E route. For that reason 7D is less preferable than 4E and 5E. Rank 12: 7E. Configuration 7E would utilize the most visually impacting panel profile, development footprint, and Gen-Tie E route. As a result, Configuration 7E would be the most visually impacting of all the development configurations and would be least preferred overall.

F001-171 The commenter states that because the Draft EIS applies an Interim VRM Class IV management class to the proposed project site, the parenthetical of the third sentence of the third complete paragraph page 4.19-3 should be revised to state "(Commensurate with Class IV VRM objectives)."

The requested change has been incorporated in the Final EIS.

F001-172 The commenter requests that Figure 4.19-3B be revised to depict fencing and collector poles as they would appear from KOP 3 and as they appear in Figure 4.19-3D. The commenter further requests that the transmission line should be included if this would be visible from KOP 3. The commenter notes that while both KOP 3 and KOP 3A are illustrative of viewpoints along northbound Kaiser Road, KOP 3A is between 0.15 and 0.65 miles closer to the project and renders the project more noticeable to the viewer.

At the time that Figure 4.19-3B (KOP 3) was prepared, collector pole information was not available. However, at the time that the simulation of Alternative 7 was prepared (Figure 4.19-3D, KOP 3A), the pole and fencing information was available, and those features were included in the simulation. The view presented in Figure 4.19-3B (KOP 3) encompasses a more distant portion of the development area compared to the closer portion captured in Figure 4.19-3D (KOP 3A). As a result, the collector poles and fencing would appear as barely discernible features in the KOP 3A simulation and would not affect the characterization of the impact, the viewpoint's contrast assessment, the impact's overall significance classification, or the project's consistency with the applicable VRM Classification. For these reasons, the fence and collector poles were not added to the KOP 3 simulation presented as Figure 4.19-3B.

F001-173 The commenter recommends deleting the sentence "Bury all or part of the structure" from the third bullet point of MM VR-3 on page 4.19-17 to reflect the conclusion of Chapter 2 of the Draft EIS that undergrounding of the proposed project's gen-tie lines is infeasible.

The requested change has been incorporated in the Final EIS.

F001-175 The commenter requests that BLM delete the parenthetical requirement for on-demand, audio-visual warning system mitigation in clause "c)" of the central paragraph of page 4.19-19, as The Federal Aviation Administration (FAA) has not yet incorporated Audio Visual Warning System (AVWS) into its Part 77 obstruction marking and lighting circular as an approved technology, and, in any event, it is the FAA, not the BLM or the Applicant, that determines appropriate marking and lighting arrangements for projects within its Part 77 purview.

The mitigation measure has been revised to require that the on-demand, audio-visual warning system that is triggered by radar technology shall be implemented if technically and economically feasible, and if allowed by the FAA.

F001-176 The commenter notes that the difference in perspective between figures 4.19-3B and 4.19-3D increases the contrast of Alternative 7 relative to the depiction of Alternative 4, making Alternative 7 appear disproportionately larger and decreasing the screening effect of vegetation.

It is acknowledged that the perspective provided in Figure 4.19-3B is of a more distant portion of the project development area and simulates the lower height panels. The perspective provided in Figure 4.19-3D is more northerly and encompasses a closer portion of the project development area. The 4.19-3D simulation is of the taller panels. For these reasons, the panels in Figure 4.19-3D appear larger than the panels in Figure 4.19-3B. It is also true that the intervening vegetation would be more effective in screening the shorter panels of Figure 4.19-3B than it would be in screening the taller panels of Figure 4.19-3D.

F001-177 The commenter suggests that a simulation of Alternative 4 from the vantage point represented in KOP 8A would result in no discernible difference between Alternatives 4 and 7. The Applicant requests inclusion of language to this effect at the end of the KOP 8A analysis of Alternative 7 on Draft EIS page 4.19-26.

A paragraph addressing the similarities of Alternatives 4 and 7 as viewed from KOP 8A has been added at the end of the discussion of KOP 8A on page 4.19-26.

F001-178 The commenter states that Draft EIS page 4.19-38 asserts that Alternative C would have a larger cumulative effect compared to Alternatives D and E because it would site one gen-tie line directly adjacent to another. The Applicant disagrees with this conclusion and cites specific examples.

The "slightly larger adverse cumulative effect" described on page 4.19-38 refers to the specific viewing opportunities along Kaiser Road and in the immediate vicinity of Desert Center and Lake Tamarisk where specific local views would encompass two transmission lines in the immediate foreground as opposed to one transmission line. It is true that from certain viewing locations, both the Desert Sunlight transmission line and either the Alternative D or E transmission lines may be visible in the same field of view, but they would not both be in the immediate foreground of the view. If they were, that would effectively double the structural prominence, complexity, contrast, and view blockage. However, relative to Alternatives D and E, Alternative C would avoid the proliferation of multiple transmission lines across the landscape that would result from either Alternative D or E. As a result, Alternative C would be preferred over either Alternative D or Alternative E. This relative ranking has been added to the comparison of gen-tie action alternatives in Table 2-12 of Section 2.

F001-179 The commenter states that the first full paragraph of page 4.19-40 asserts that Alternative C would have a larger cumulative effect compared to Alternatives D and E because it would site one gen-tie line directly adjacent to another. The commenter disagrees and draws the opposite conclusion for the reasons described in Comment F1-178.

See response to Comment F001-178.

F001-180 The commenter states that the first full paragraph of page 4.19-41 asserts that Alternative C would have a larger cumulative effect compared to Alternatives D and E because it would site one gen-tie line directly adjacent to another. The commenter disagrees and draws the opposite conclusion for the reasons described in Comment F1-178.

See response to Comment F001-178.

F001-181 The commenter states that significance criterion V-7 sets a lower threshold than CEQA requires for incremental contributions to significant cumulative impacts, and therefore its content should be revised as follows: “The presence of DHSP would constitute a cumulatively considerable contribution to a significant cumulative visual impact to a cumulative visual alteration.”

The requested revisions have been substantially made in Section 4.19 under in Section 4.19.6.

F001-182 The commenter states that the Draft EIS's conclusion on pages 4.19-44 and 4.19-45 that high-profile panels would substantially degrade views from Kaiser Road even with a 200-foot buffer in place is erroneous. T feels that, after taking into consideration a 200-foot buffer distance, views of high-profile and low-profile panels would be comparable and less than significant under the “substantially degrade” standard of significance criterion V-3.

It should be noted that although a 200-foot vegetation buffer is required, it would not be absolutely effective. The existing vegetation is not continuous, overlapping, or dense. To the contrary, there are numerous breaks in the vegetative line along Kaiser Road, much of the vegetation is sparse and low growing, and there are numerous expanses of terrain that have very limited vegetation at all. So the resulting view corridors to the project arrays, combined with the taller solar panels of Alternative 7 (at least 10 to 11 feet taller than the low-profile panels of Alternative 4), create the increased visibility of Alternative 7 that causes the significant impact on views from Kaiser Road. The vegetation buffer will help reduce visibility of the project from Kaiser Road but not eliminate it.

F001-183 The commenter states that the “Alternative C' paragraph on page 4.19-48 asserts that Alternative C would have a larger cumulative effect compared to Alternatives D and E because it would site one gen-tie line directly adjacent to another. The commenter disagrees and draws the opposite conclusion for the reasons described in Comment F001-178.

See response to Comment F001-178.

F001-207 The commenter states that the “Inconsistency with public policy” row of the “Visual Resources” category of Table 4.24-1 is incorrect. The commenter requests that BLM conform the row to the VRM Class IV consistency determination of Section 4.19.

The requested changes have been incorporated into the Final EIS.

WATER RESOURCES

A006-1 The commenter states that page 3.20-6 of the Draft EIS indicates that total estimated water requirements would be approximately 400 to 500 acre-feet per year (afy), that operations would require 25 to 40 afy, and that with a total expected lifetime of 30 to 50 years, up to 2,200 to 3,000 af will be needed for the project, which would come from groundwater wells on- and off-site. The commenter further notes that the project area is within the accounting surface area of the Colorado River, meaning that the underlying aquifer is hydraulically connected to the Colorado River, and that groundwater withdrawn from the wells located here would be replaced by Colorado River water, in part or in total. The commenter states that consumptive use of Colorado River Water needs to be accounted for by the Secretary of the Interior. The commenter further states that according to the Supreme Court in *Arizona v. California et al.* (547 U.S. 150, 2006), consumptive use means diversion from the stream, and includes all consumptive uses including underground pumping.

Consumptive use of Colorado River water is addressed in both Sections 3.20 and 4.20, and potential impacts associated with use of appropriated river water resulting from groundwater production from below the Colorado River Accounting Surface is addressed in Mitigation Measure WAT-7, as revised for the Final EIS.

A006-2 The commenter states that no additional Colorado River water is available for new project proponents under any conditions, except through an agreement with an existing Boulder Canyon Project Act (BCPA) contract holder through an exchange of non-Colorado River water for Colorado River water. The commenter suggests that a mechanism exists for obtaining a legally authorized and reliable water supply for the Interstate 10 area solar projects by obtaining water through the Metropolitan Water District of Southern California.

Text has been revised to clarify that no use of Colorado River water without entitlement to such water would be lawful. Mitigation Measure WAT-7 has been revised to more clearly address this potential impact.

A009-1 The commenter, Metropolitan Water District of Southern California (MWD), provides a summary of the proposed project and of MWD's role relevant to the project. With regard to land use issues and potential impacts on MWD facilities, the commenter states that MWD has not yet identified any direct impacts from the project to MWD facilities, including where the solar facility is adjacent to MWD ROW, although there are impacts from Alternatives B, D, and E where the gen-tie line crosses MWD lands. MWD provides a map of the project location relative to MWD facilities, including real estate interests and fee-owned ROWs, easements, and other properties that are part of MWD's supplemental water conveyance system, and requests that the Final EIS for the proposed project includes an assessment of potential impacts to MWD facilities with identification of measures to avoid or mitigate adverse effects, consistent with the land use mitigation measures identified in the Draft EIS. The commenter also states that MWD is concerned about conflicts arising from situating solar developments near MWD electrical transmission infrastructure, and states that the proposed project should not impede or increase the cost of any electrical operation or maintenance activities associated with MWD's electrical transmission system, and requests that the Final EIS includes an assessment of potential impacts of the project to MWD's transmission system.

Section 4.11 of the Final EIS has been updated to describe potential conflicts with existing land uses and to include mitigation to resolve those conflicts.

A009-2 The commenter states that MWD is concerned about the proposed project's potential direct and cumulative impacts on water supply, specifically related to Colorado River water and local groundwater. The commenter describes that the Colorado River is fully allocated, and that users of this water must hold entitlement to do so, and cites the case of *Arizona v. California*, which includes a Consolidated Decree which is also referenced on page 3.20-4 of the Draft EIS. The commenter notes that Mitigation Measure WAT-7, identified in the Draft EIS, addresses the aforementioned concerns regarding use of allocated Colorado River water, and states that the project proponent would need to obtain imported water supplies from an existing contract holder or other non-Colorado River resource. Finally, the commenter states that several alternatives identified in the Draft EIS are not feasible because most of the identified water sources are already fully allocated (this issue is also addressed under comment 32).

Mitigation Measure WAT-7 has been extensively revised to address the infeasibility of the conservation measures noted by the commenter. Text has also been added to describe that MWD would be willing to enter into an agreement for water provision to the project owner.

A009-3 The commenter states that MWD is willing to consider terms and conditions of a water sale agreement to furnish supplemental water to the project proponent, if there is evidence of adverse impacts to local water supplies per Mitigation Measure WAT-7. The commenter notes that Section 131(b) of the MWD Act provides MWD the authority to execute an agreement such as would be required for the proponent to purchase water from MWD for the project. Such an agreement would represent an exchange of non-Colorado River water available to MWD for Colorado River water available to MWD.

Text has been added to clarify that MWD would be willing to enter into an agreement to provide water for the project.

A009-4 The commenter requests that the Final EIS address the proponent's proposed method for offsetting use of local groundwater pumped from below the Colorado River Accounting Surface, as required per Mitigation Measure WAT-3, and address any potential impacts associated with such offset(s).

Mitigation Measure WAT-3 has been revised to more clearly address potential impacts. Text following MM WAT-3 describes potential impacts that could occur as a result of implementing this measure.

A009-5 The commenter requests that MWD be copied on all groundwater monitoring and reports for the project because of the potential impacts to MWD's supplies from use of water pumped from below the Colorado River Accounting Surface.

Mitigation Measure WAT-7, which requires the Colorado River Water Supply Plan, has been revised to require coordination with and reporting to the MWD.

A009-6 MWD requests that the following phrase is deleted from page ES-9 of the Draft EIS, in reference to access during paleontological surveys, because MWD has provided access to its land: "…land owned by Metropolitan Water District of Southern California…"

The requested change has been incorporated into the Final EIS.

A009-7 The commenter requests several editorial revisions to pages 2-38, 2-65, 3.20-4, and 3.20-6 of the Draft EIS.

Revisions on page 2 not incorporated — need active draft. Revisions to Section 3.20 incorporated.

A009-8 The commenter states that the MWD's Board of Directors voted on October 8 of 2002 not to proceed with the Cadiz Groundwater Storage and Dry-Year Supply Program, and requests that text discussing this program be deleted from page 3.20-15 of the Draft EIS. The commenter notes that the Santa Margarita Water District (SMWD) has a program in the same area, referred to as the Cadiz Valley Water Conservation, Recovery, and Storage Project, and provides two internet links for information on this SMWD project, for incorporation into the proposed project's EIS, as appropriate.

Requested revisions have been incorporated, and new text has been developed to describe the SMWD program.

A009-9 The commenter requests minor revisions to text provided on the following pages of the Draft EIS: 3.20-6, 3.20-20, and 3.20-21.

Requested revisions have been incorporated.

A009-10 The commenter requests revisions to text provided on page 3.20-21 of the Draft EIS regarding appropriation of Colorado River water.

Requested revisions have been incorporated.

A009-11 The commenter requests revisions to text provided on pages 4.1-6, 4.1-17, 4.11-8, and 4.18-5 of the Draft EIS, based on text in the second paragraph on page 5 and the first paragraph on page 6 of the USGS' Scientific Investigations Report 2008-5113.

Revisions to Sections 4.1 and 4.11 not yet incorporated — need active file. Revisions to Section 4.20 incorporated.

A009-12 The commenter requests revisions to text provided on pages 4.20-8 and 4.20-9 of the Draft EIS.

Requested revisions have been incorporated.

A009-13 The commenter notes that page 4.20-15 incorrectly states that the project's operational water requirements are 176 percent lower than the project's construction requirements, where the identified ranges are actually 92.2 percent lower for operation than construction.

Text has been revised to reflect the correct figure of 92.2 percent.

A009-14 The commenter requests revisions to text provided on pages 4.20-15, 4.20-16, and 4.20-18 of the Draft EIS.

Requested revisions have been incorporated.

A009-15 The commenter requests revisions to text provided on pages 4.20-22 and 4.20-23 of the Draft EIS.

Requested revisions have been incorporated.

A009-16 The commenter states, with regards to text provided on page 4.20-23 of the Draft EIS, that potential effects associated with water purchased from MWD would be determined by the method of water delivery.

Potential effects associated with water delivery are discussed following the mitigation measure.

A009-17 The commenter requests revisions to text provided on pages 4.20-26, 4.20-27, and 4.20-28 of the Draft EIS.

Requested revisions have been incorporated.

A009-18 The commenter states that some of the water conservation measures identified on page 4.20-28 of the Draft EIS are not feasible because the identified supplies are already fully allocated, including irrigation improvements in the Palo Verde Irrigation District. The commenter also states that implementation of conservation programs to conserve Colorado River water in the floodplain communities would not make Colorado River water available for use on the proposed project, as any unused water by holders of higher priorities would become available to MWD (not to the project) in accordance with water delivery contracts executed by the U.S. Department of the Interior. The commenter further states that participation (by the project proponent) in the BLM's Tamarisk Removal Program would not make Colorado River water available for the proposed project because water consumed by phreatophytes (such as tamarisk) is not charged as a use of water for U.S. Supreme Court Decree accounting purposes by the U.S. Bureau of Reclamation.

The EIS has been revised to describe that it would not be possible for the project proponent's participation in the conservation programs noted by the commenter to result in the replacement of an water consumed from below the Colorado River Accounting Surface to meet the project's water supply requirements. Mitigation Measure WAT-7 has been revised to require that the project owner identify water conservation / offset measures through coordination with the BLM, the Regional Water Quality Control Board (RWQCB), and the MWD.

A009-19 In reference to text provided on page 4.20-28 of the Draft EIS, the commenter states that the filing of an application by the project proponent with the U.S. Bureau of Reclamation for an allocation of Colorado River water would not guarantee the issuance of such allocation, as all of California's apportionment to use of Colorado River water has already been allocated by the U.S. Department of the Interior.

The EIS has been revised to clarify that the filing of an application for allocation of Colorado River water does not guarantee that such an allocation will be issued, and that the project proponent should not assume that an allocation will be obtained. As such, the project proponent would be required to purchase off-site water from a non-Colorado River water source, if at any time it is determined that water for the proposed project is pumped from below the Colorado River Accounting Surface.

A009-20 The commenter requests revisions to text provided on page 4.20-28 of the Draft EIS regarding how it would be determined whether the project is pumping water from below the Colorado River Accounting Surface.

Requested revisions have been incorporated.

A009-21 The commenter requests editorial revisions to text provided on pages 4.20-30, 4.20-31, 4.20-33, 4.20-37, 4.20-43, 4.20-44, 4.20-48, and 4.20-51 of the Draft EIS.

All suggested revisions have been incorporated.

A010-2 The commenter encourages the BLM and the project owner to consider eliminating water use for panel washing, similar to what Desert Sunlight has agreed to do. The commenter also requests that the Final EIS include confirmation of an alternative water supply and conditions for its use.

Different panel technologies can tolerate lack of panel washing differently; the Desert Sunlight panels are very high efficiency, so don't need to be clean to produce sufficient power to meet the obligations of that project's PPA. The panels being proposed by the Applicant for the Desert Harvest Solar Project range from a variety of panel types, and they are conservatively assumed to require washing to maintain a level of efficiency required for the project to maintain its desired level of output. Reducing panel washing frequency may occur by the project owner once the project is constructed if conditions warrant less panel washing. However, the EIS conservatively estimates the maximum potential use of water for washing panels.

The Final EIS does not identify an alternative water source and conditions for its use because the Applicant has not yet secured an alternative water source. However, mitigation measures presented in the EIS in Chapter 4 (page 4.XXXX) require the project owner to secure a viable alternative water source prior to construction.

A010-7 EPA provides a summary of their rating definitions. EPA states concern over potential significant groundwater drawdown and cumulative impacts to the Chuckwalla Valley Groundwater Basin (CVGB) from the project and reasonably foreseeable projects in the vicinity, given that overdraft conditions are expected during each year of project operations. EPA states there does not appear to be a requirement or trigger event for implementation of MM WAT-2 to mitigate groundwater effects, and recommends that the Final EIS do the following: identify the alternative non-CVGB water source, as recommended by MM WAT-2, and analyze potential impacts that may result; clarify the circumstances under which this alternative water supply would be used; address mitigation measures that would be taken should groundwater resources become overextended; and reconcile statements from Chapter 3 that sufficient water supply is available in the CVGB with Chapter 4 statements regarding expected overdraft.

Mitigation Measure WAT-2 has been revised in the Final EIS as recommended.

A010-8 EPA states that previous projects have stated that groundwater drawdown could exceed thresholds of impacts to vegetation, wells, and the water table level. EPA states that the EIS does not discuss the likelihood of water level drawdown to levels that trigger MM VEG-10 and MM WAT-3. EPA recommends including a numerical analysis in Section 4.20 of the anticipated drop in groundwater levels and associated impacts to groundwater-dependent vegetation and woodlands, and an evaluation of whether operations of all reasonably foreseeable projects could affect the Palo Verde Mesa Groundwater Basin by inducing underflow.

To clarify, MM WAT-3 includes a numerical threshold by requiring that drawdown of five feet would trigger mitigation. Regarding the commenter's request for the Final EIS to include a numerical analysis of overdraft conditions and cumulative effects, in order to produce such an analysis, it would be necessary to generate a computer model of groundwater flow and behaviors, which is considered beyond the scope of analysis required per NEPA to reasonably characterize potential impacts of the project and identify effective mitigation measures. Discussion of groundwater-dependent vegetation and woodlands, and potential adverse effects that could result from a temporary lowering of groundwater levels is provided in Section 3.3.9 of the Final EIS. Hydrologic connectivity between the Chuckwalla Valley Groundwater Basin and the Palo Verde Mesa Groundwater Basin is discussed throughout Section 3.20, and existing text in Section 4.20.6 (see the first bullet under “Indirect Effects”) describes that groundwater pumping would decrease outflow from the Chuckwalla Valley Basin to hydrologically connected basins, resulting in decreased water availability in affected basin(s).

A010-9 EPA recommends that in light of the overdraft conditions of the CVGB, and the technical feasibility of eliminating periodic washing of solar panels, BLM should consider adopting, as a condition of certification in the Final EIS and ROD, that water will not be used for panel washing. EPA states that Desert Sunlight and a First Solar project in Nevada have made a similar agreement.

See response to Comment A010-2.

A010-12 EPA states that the EIS contains conflicting language regarding the effects of the Desert Sunlight earthen berm on hydrology and habitat on the DHSP site. EPA recommends that the Final EIS clarify these short and long-term effects.

The EIS is not intended to address direct effects on the Desert Sunlight project.

A010-13 EPA states that the conclusion that "no unavoidable adverse effects to water resources would result from implementation" appears inaccurate, as the project would result in a net loss of desert wash resource functions. In addition to the requirements of MM VEG-6 to provide off-site compensation land, EPA recommends that BLM consider whether opportunities are available to restore or enhance other lands within the Chuckwalla Valley watershed to replace desert wash functions lost on the project site.

MM VEG-6 has been revised to clarify that final compensatory habitat acreages will be based on the final alternative selected and final project design, in order to fully account for potential impacts of the project.

A010-14 EPA states that the Draft EIS does not provide information about fencing or the effects of fencing on drainage systems, and that fence design should address hydrologic criteria, not just security performance. EPA recommends that in the Final EIS, BLM should describe where permanent fencing will be used and the potential effects of fencing on drainage systems, ensure that fencing will meet hydrologic performance standards, review the National Park Service's published article on the effects of the international boundary pedestrian fence on drainage systems and infrastructure, and ensure that such issues are adequately addressed with this project.

Section 2.5.2 of the Final EIS states that each solar farm alternative would include the installation of fencing around the perimeter of the site. Section 2.5.4 includes a subheading titled "Site Security, Fencing, and Lighting," under which it is described that a permanent security fence would be installed around the solar plant site boundary, and that the fence would be eight feet tall, with posts set in concrete, and would include bottom tension wire; it is anticipated that the fencing would be made of chain link. In comparison, the fencing described in the NPS study noted by the commenter (available online: National Park Service study referred to by the commenter is available online (http://www.nps.gov/orpi/naturescience/upload/FloodReport_July2008_final.pdf) was made of wire mesh, with panels at drainage crossings where grates were installed to accommodate flood flows, where the grate openings were six inches high, 24 inches wide, and separated by one-inch by three-inch bars. It is important to note that the design of fence described in the NPS report was substantially different than the design of the fence associated with the proposed project; although both fences are designed to impede pedestrian movement, the Desert Harvest Solar Project site is not located in a highly trafficked area or an area with highly controversial pedestrian movement, as is the international border between the U.S. and Mexico.

The NPS study recommends that the international pedestrian fence should be redesigned to properly convey debris-laden flood flows and avoid significant pooling, lateral flows, and scour while maintaining structural integrity. The Final EIS for the proposed project includes Mitigation Measure (MM) WAT-4 (Surface Water Protection Plan and Drainage Design Specifications), presented under "Mitigation Measures" in Section 4.20.6, which states, "A Surface Water Protection Plan (SWPP) shall be developed for the project and shall include BMPs to ensure that drainage design at the project site would minimize potential adverse effects associated with groundwater recharge, drainage pattern alterations, and water quality…The SWPP shall be adhered to during construction and operation of the project, as applicable." MM WAT-4 includes a list of minimum requirements that must be included in the SWPP, including the following which are applicable to the avoidance of adverse effects associated with drainage pattern alterations:

- Downstream drainage discharge points shall be provided with erosion protection and designed such that flow hydraulics exiting the site mimic the natural condition as much as possible;

- Drainage from impervious surfaces such as roads, driveways, and buildings shall be directed into channel(s), drainage basin(s), or depression(s), as applicable to perpetuate the natural drainage patterns as much as possible; and

- Mass grading and contouring shall be done in a way to direct surface runoff towards the above-referenced basin(s) and/or depression(s).

In order to ensure that the security fence to be installed around the perimeter of the project site meets comparable recommendations as those provided by the NPS report, towards the purpose of avoiding significant adverse drainage pattern alterations associated with the perimeter fence, the following requirement has been added to MM WAT-4: "During construction and operation of the project, the perimeter fence shall be inspected on a regular basis and cleared of debris, at intervals determined by the Environmental Monitor to be appropriate to ensure that debris does not collect along the fence such that flood flows would be impeded."

A010-15 EPA describes legal requirements for assessing and avoiding floodplains and flood hazards and recommends that BLM describe how its review of floodplains is consistent with these legal criteria. EPA states that BLM should also provide a detailed description of the current Federal Emergency Management Agency (FEMA) floodplain in the project area, and include results of consultation with FEMA, if appropriate.

Executive Order 11988 is discussed in Section 3.20.1 of the Draft EIS, under a subheading titled "Executive Order 11988, Floodplain Management." Additional text has been incorporated under this subheading to describe how BLM has considered the proposed project's consistency with this executive order.

B006-29 The commenter states that the impacts on soils, particularly in washes, have not been adequately addressed in the Draft EIS. The commenter states that the Draft EIS fails to evaluate impacts to Waters of the State, which is necessary if the document is to be used in a CEQA process. The commenter states that despite their importance, the Draft EIS fails to evaluate the impact of the proposed project on the ephemeral and intermittent streams and the ecosystem processes that they provide both on and off of the proposed project site. The commenter states that a revised or supplement Draft EIS will need to include an analysis of these issues.

Sections 4.3 and 4.20 of the EIS analyzes effects to state jurisdictional resources (Draft EIS at pages 4.3-64 and -65 and pages 4.20-11 and -12). Effects on soils and ephemeral streams are analyzed in Section 4.20-9 through -11).

B006-30 The commenter states that the California Desert Protection Act (CDPA) reserves water rights for wildernesses created under the Act, and thus the BLM must ensure that use of water for the proposed project (and cumulative projects) over the life of the proposed projects will not impair those values in the wilderness that depend on water resources. The commenter states that although no express reservation of rights has been made for many of the other public lands in the CDCA, the Draft EIS should have addressed the federal reserved water rights afforded to the public to protect surface water sources on all public lands affected by the proposed project, pursuant to Public Water Reserve (PWR) 107; this examination must include a survey of the any water sources potentially affected by the proposed project. The commenter states that because PWR 107 also protects the public lands on which protected water sources exist, BLM should also consider the direct and indirect impacts of the proposed project on the surrounding lands as well as impacts to the ecosystem as a whole.

Mitigation Measure MM WAT-2 provides for replacement of groundwater resources during basin overdraft conditions and MM WAT-3 requires monitoring and minimizing the effects of local groundwater drawdown. Implementation of these measures will ensure that wilderness values are not affected by groundwater effects of the project.

B006-31 The commenter states that the Draft EIS fails to address any potential water rights that could arguably be created from use of groundwater by the proposed project on public lands. The commenter states that despite legal complexity, BLM must address this question and either require the project proponent to agree that no water rights will be created or to otherwise ensure that any water rights that could arguably be created will be conveyed back to the BLM owner and run with the land at the end of the proposed project ROW term.

See response to Comment B008-9.

B008-7 The commenter states that precipitation records from the project area show low rainfall and two major droughts since 1990. The commenter states that precipitation records used in the Draft EIS are from Blythe, 50 miles from the project area. The commenter states that conversations with the USGS identified the groundwater as thousands of years old, but that no analysis was conducted in the EIS to assess the age or recharge rate of groundwater. The commenter states that the EIS does not state the project water source and construction water requirements, that no public water system is available, and that groundwater must consequently come from wells tapping the CVGB.

As stated in Section 3.20.2: Water Resources Existing Conditions, average precipitation data from both Blythe and Eagle Mountain were used to estimate precipitation in the Chuckwalla Valley. The reference provided by the commenter shows data for the month of January only; when all months are considered the average precipitation data reported in the Final EIS is correct at approximately 3.6 inches per year. Regarding tritium, because of spatial and temporal variation in concentrations, tritium is not reliable as a sole measurement of groundwater age, and nearby precipitation values should be used to help calibrate measurements.

B008-8 The commenter states that private well owners in the project area must be protected and wells adequately monitored to ensure groundwater levels are maintained. The commenter states that groundwater levels have dropped due to existing local projects, such as Desert Sunlight, and that future projects could create a significant drop in groundwater level that could impact local businesses and agriculture, including the commenter's.

Mitigation Measure WAT-2 addresses the use of groundwater in the CVGB by requiring the project to identify and utilize either an off-site water source or water conservation measures for years in which the CVGB is projected to be in overdraft conditions. This measure would ensure that impacts to groundwater resources are avoided or minimized, and would help protect local water supplies and businesses.

B008-9 The commenter states that the CDPA reserves water rights for wilderness areas created under the Act. The commenter states that at minimum, BLM must ensure that use of water for the proposed and cumulative projects, over the life of the projects, will not impair wilderness values and resources identified in the CDPA that depend on water resources. The commenter states that BLM must either create no new water rights for the project owner or convey water rights back to the project owner at the end of the proposed project term, and that no rights must be sold to any third party or used off-site for any purpose. The commenter reiterates Comment B008-7 regarding use of a public water system.

Regarding the CDPA, see response to Comment B006-30. Regarding water rights, BLM cannot create new water rights or convey them back. As a landowner in a groundwater basin, the project owner has a right to consume groundwater underlying the property. Such use is required to occur on an “equal and correlative” basis by all landowners within a basin. Response to Comment F001-190 provides additional information on equal and correlative use in a groundwater basin, and the project's relationship to such use. Mitigation Measure WAT-2 requires the project to use water outside the basin or institute conservation measures in projected overdraft years in the CVGB. Regarding use of a public water system, see response to Comment B008-7.

D002-7 The commenter states that there is concern about groundwater overdraft in the CVGB.

The Draft EIS fully considers the project's effect on overdraft conditions, including cumulative conditions, in Section 4.20 and Appendix E1. Mitigation Measure MM WAT-2 requires the provision of water from an alternative source and/or groundwater offsets.

F001-7 The commenter suggests that, with regard to a mitigation measure for groundwater resources that would protect the Chuckwalla Valley Groundwater Basin from overdraft conditions attributed to the DHSP (page ES-9), such a measure "could" (as opposed to "would") contribute to unavoidable adverse air quality effects and adverse effects on noise and traffic.

As described in Section 4.20.6 under MM WAT-2, adoption of this mitigation measure would result in the adverse effects described on page ES-9. The measure may or may not be adopted, but this does not change the impacts that would result from its adoption. No changes have been made to the document.

F001-71 The commenter states that in section 3.20, Water Resources (pages 3.20-6 and 3.20-7), the Draft EIS inappropriately asserts that the DHSP would not be subject to SB 267's wind and solar exemption because the project exceeds 75 acre-feet of water per year during construction. The commenter construes the term annually to refer to the life of the project, which would reduce project water usage to less than 75 acre-feet per year and would be consistent with SB 610. However, the commenter asserts it respects the discretion of Riverside County to require a water supply assessment as a cooperating agency under NEPA and as lead agency under CEQA.

SB 267 does not provide the interpretation of annual water usage offered by the commenter, although it does specify that a solar PV development requiring more than 75 acre-feet of water per year is considered a "project" under SB 610; the most literal interpretation of this definition is the quantity of water used by a project during any 12-month period and therefore, for the sake of being conservative, this is the definition used in the analysis. Text has been added to Section 3.20 to describe the commenter's opinion.

F001-72 The commenter recommends including the following example on page 3.20-16 with regard to Groundwater Level Trends: "For example, data from wells within the Desert Center area show a period of water level decline in the mid-1980s during periods of expanded agricultural operations when combined pumping exceeded 20,000 afy. Agriculture operations were reduced during the late 1980s and more recently (2000) water levels in the Desert Center have been measured at levels similar to the 1960s (AECOM 2011). Accounting Surface Technical Memorandum Appendix O to the Desert Sunlight Solar Farm EIS is attached."

Revisions have been incorporated, and a new reference to the noted Desert Sunlight memorandum produced by AECOM has been added.

F001-73 The Applicant disagrees with and requests deletion of the opinion expressed on page 3.20-23 under "Colorado River Accounting Surface" that "Due to the hydrologic connection between the CVGB and the Colorado River, all groundwater production at the DHSP site could be considered Colorado River water." Deletion of this sentence is appropriate because it ignores the Colorado River Accounting Surface Standard developed by USGS.

Text has been revised to clarify that any groundwater production from below the USGS Colorado River Accounting Surface Standard is considered Colorado River Water. Text describing hydrologic connectivity of groundwater at the project site to surface water in the Colorado River has been retained, as this is a physical fact and not a statement of opinion.

F001-87 The commenter states that BMP 3 of page 4.3-32 should be revised to state that the project proponent "shall prevent" rather than "will not allow" water containing pollutants from entering ephemeral drainages or being placed in high storm flow locations, in the off-chance spills occur even after good faith best efforts.

The requested revisions have been made to the Final EIS.

F001-167 The commenter states that the last sentence of page 4.17-25 incorrectly states that MM WAT-2 would require use of an alternate water source for the project. The commenter states that as drafted, MM WAT-2 requires identification of an alternate water source prior to construction.

The Section has been revised to reflect changes to MM WAT-2. The commenter's specific language recommendations no longer apply to the revised text of MM WAT-2.

F001-184 The commenter requests that MM WAT-2, if retained, be revised to state on page 4.20-5 "MM WAT-2 (Alternative Water Source and Groundwater Offsets) would ensure that the project does not perpetuate overdraft conditions."

MM WAT-2 has been revised in the Final EIS. The substance of these changes are in line with the commenter's recommendation, but revisions include many additional details.

F001-185 The commenter requests that MM WAT-2, if retained, be revised to state on page 4.20-7 "MM WAT-2 (Alternative Water Source and Groundwater Offsets) would ensure that the project does not perpetuate overdraft conditions."

MM WAT-2 has been revised in the Final EIS. The substance of these changes are in line with the commenter's recommendation, but revisions include many additional details.

F001-186 The Applicant disagrees with the approach taken to the analysis of the Colorado River Accounting Surface, and particularly with the data and references used to describe depth to groundwater and groundwater level trends. The Applicant suggests revisions to this analysis which include discussion of historic groundwater level trends in the area, and a conclusion that there is not potential for groundwater pumping associated with the project to draw on Colorado River water; based on this conclusion, the Applicant also suggests deleting Mitigation Measure WAT-7 (Colorado River Water Supply Plan).

Text has been revised to include discussion of the groundwater elevation data and resources described by the Applicant, and a new reference to the noted Desert Sunlight technical memorandum produced by AECOM has been added to both the environmental setting and the impacts analysis sections. However, these resources do not prove that there is no potential for the project to encounter Colorado River water and therefore, the conclusions have not been revised and MM WAT-7 has been retained. MM WAT-7 has been revised to allow the project owner more flexibility in its implementation.

F001-187 The commenter notes that decommissioning of the proposed project would likely require substantially less water than construction.

The requested changes have been made in the Final EIS.

F001-188 The Applicant disagreed with the need for Mitigation Measure WAT-2, which requires identification of an alternative water source during projected years of overdraft. The Applicant suggests deletion of this measure. The Applicant notes that the CVGB would experience overdraft conditions regardless of the proposed project, and suggests that the impact analysis should use the same approach used in Desert Sunlight, which was to conclude that the project's contribution to cumulative overdraft conditions would be temporary and less than significant.

MM WAT-2 has been revised to provide the project owner more flexibility in implementation, such as, the project owner may revise projections of overdraft and, per approval of BLM, also revise implementation of this MM.

The Applicant is correct in noting that the Draft EIS states that overdraft would occur regardless of the project — this does not mean that a contribution of the project to overdraft would not be significant. Mitigation included in the EIS only requires the project owner to mitigate for the DHSP's contribution to overdraft conditions and therefore does not place undue burden on the project owner.

The fact that the percentage of outflow from the CVGB represented by the project's operational water requirements is very small does not negate the fact that the project would contribute to overdraft conditions. The fact that analyses for other projects such as Desert Sunlight have used such a comparison to justify impact determinations of less than significant does not mandate that this analysis for DHSP use the same justification, and does not mean that such a justification is scientifically sound or reasonable. The BLM will make project decisions on a case-by-case basis.

The Applicant states that DHSP would not "force CVGB past an overdraft 'tipping point' it otherwise would not have reached" — this fact is also reflected in the EIS, that overdraft conditions would occur in the CVGB regardless of the project — as stated above, this does not mean that DHSP would not contribute to said overdraft conditions. If overdraft is present, and DHSP pumps groundwater from the basin, DHSP is contributing to overdraft conditions.

Agreed that overdraft conditions would be "temporary," but could be temporary over a period of 30+ years and therefore mitigation for the project's contributions to overdraft conditions are both justifiable and reasonable.

F001-189 The Applicant states that if BLM decides to retain MM WAT-2, revisions to the measure should be incorporated to tie action items to actual physical conditions rather than projected (overdraft) conditions. The Applicant also notes that many projects in the cumulative scenario may not occur, or may occur using less water-consumptive technologies than identified.

Agreed that there are a number of assumptions used in the cumulative impacts analysis, including the assumption that all identified projects will move forward and will occur at the same time as the proposed project. Although it is possible that some cumulative projects will not move forward, or will be revised, at this time it is not possible to identify those changes with certainty. Therefore, in order to be conservative in this analysis, it must be assumed that all cumulative projects will move forward as described in cumulative projects scenario. Regarding the Applicant's suggestion to tie MM WAT-2 to actual overdraft conditions, text has been revised to provide the Applicant with greater flexibility in implementing this measure. Text has also been added to clarify that identification of the physical presence of overdraft conditions requires long-term groundwater level monitoring, and interpretation of monitoring results — the BLM is currently undertaking such an effort, but usable results will not be available for several years, and therefore for the purposes of this analysis and the identification of effective mitigation measures, it is necessary to make certain assumptions about when and how overdraft conditions may occur.

F001-190 The Applicant describes that groundwater use at the project site is subject to California state water law, which allows overlying landowners correlative rights to local groundwater supply, and that offsets or out-of-basin water use would only be required where a landowner's correlative proportion of water is exceeded in use. The Applicant suggests that this principle of correlative use should be incorporated into Mitigation Measure WAT-2 so that the proposed project does not disproportionately bear a burden for mitigation that should be shared by all water users in the groundwater basin.

The commenter is correct in describing the principles of correlative groundwater use. However, California state water law is also directed by case law, and the principles of correlative use are only implemented by law when a groundwater basin has been adjudicated by the courts. Adjudication occurs through a legal process whereby a law suit is drawn by (typically) one or more landowners within a basin, against other (typically disproportionately large) water users / landowners in the basin. Through this legal process, the court determines how much water is appropriate to allocate to each landowner in the basin, and appoints a "Watermaster" to administer this decision, such that each landowner only consumes their fair share of groundwater. The Chuckwalla Valley Groundwater Basin is not currently managed under court adjudication. Although it is correct that landowners should each use only a proportionate quantity of water, the only legal tool available to implement this proportionality is adjudication. In the absence of adjudication in this basin, the BLM has determined to avoid contribution to overdraft conditions where possible, and therefore MM WAT-2 has been retained.

F001-191 The Applicant states that the securing of our-of-basin water right prior to construction poses a substantial financial, practical, and transactional burden that may be unnecessary, and notes that state law already requires an overlying pumper to seek an out-of-basin source to the extent it exceeds its correlative share without a corresponding in-basin offset.

As described in the response to Comment F001-190, although it is correct that state law describes a principle of correlative groundwater use, such principles are only enforced through the legal process of adjudication and at this time, the Chuckwalla Valley Groundwater Basin is not adjudicated. Text has been revised to allow the project owner more flexibility in implementing MM WAT-2, such as recalculating cumulative overdraft conditions in response to changes in the cumulative scenario, and adjusting implementation of mitigation requirements accordingly, subject to BLM approval. However, BLM maintains that it is appropriate to retain MM WAT-2 requiring an alternative water source during overdraft years.

F001-192 The Applicant recommends revisions to Mitigation Measure WAT-2, such that water off-sets would only be required if the project's water use exceeds the landowner's correlative rights to underlying groundwater, and revisions to cumulative overdraft projections requiring that actual cumulative conditions are calculated on a quarterly basis from issuance of the ROW grant, and that the implementation of water off-sets required per MM WAT-2 is adjusted according to quarterly overdraft calculations, not according to projections made in the EIS for the project. The Applicant also identifies MWD's Hayfield Lake / Chuckwalla Valley Groundwater Conjunctive Use Project facilities as a water offset source for the proposed project, noting that the Hayfield Valley aquifer is part of the Orocopia Valley Groundwater Basin, which provides inflow to the Chuckwalla Valley Groundwater Basin.

MM WAT-2 has been revised to allow the project owner more flexibility in implementing water offset requirements, such that if cumulative conditions are recalculated during the lifetime of the project to reflect that no overdraft conditions are present, pending BLM approval, offset requirements of MM WAT-2 may be waived. Text has also been added to state that MWD's Hayfield Lake Groundwater Storage Project may be used to obtain water offsets for the DHSP, pending written confirmation from MWD; although groundwater from the Hayfield area could be considered CVGB water because this area provides inflow to the CVGB, it is not considered the same as direct withdrawal of CVGB because the Hayfield water would be obtained through a groundwater management program implemented by MWD. The Applicant's suggested deletion of text describing the overdraft projections contained in the project's water supply assessment (WSA) and cumulative analysis have not been incorporated.

The Hayfield Lake Conjunctive Use Project may be used as a water source for the project, but may not be used towards the purpose of securing water offsets for the project, because it cannot be guaranteed that offsets applied to the Hayfield Lake would replenish the CVGB on an acre-foot by acre-foot basis.

F001-193 The Applicant suggests revisions to Mitigation Measure WAT-3 (Groundwater Drawdown Monitoring and Reporting Plan), based on mitigation provided in the Desert Sunlight EIS, to increase specificity regarding how private groundwater well owners would be compensated if project pumping results in impacts to private wells, and how the Applicant would be held responsible for adverse groundwater level trends in the project area during project pumping.

Revisions to Mitigation Measure MM WAT-3 suggested by the Applicant have been incorporated where considered reasonable and feasible.

F001-194 The Applicant states that Mitigation Measure WAT-7 would place an undue burden on the Applicant by requiring that Colorado River water offsets are secured prior to the onset of construction, and the Applicant suggests the deletion of this measure; if not deleted, the Applicant suggests revisions to clarify when and how the MM requirements are triggered.

MM WAT-7 has been revised to state that offsets do not need to be secured prior to the start of construction, but that if at any point during the construction process it is determined that project pumping is drawing water from below the Colorado River Accounting Surface, all water-use activities associated with the project will halt, effectively halting project construction, until water offsets are secured. MM WAT-7 has not been deleted as suggested because there remains a need to offset use of Colorado River water, if such use occurs as a result of depth to groundwater. Suggested revisions regarding the triggering of MM WAT-7 and cross-referencing WAT-7 to MM WAT-3 have also been incorporated.

F001-195 The commenter notes a typo in Table 4.20-4, and requests recalculation and confirmation of all totals contained in this table and throughout the WSA.

The noted typo in Table 4.20-4 has been corrected, and associated revisions have been implemented throughout the WSA and the EIS sections. Other revisions have also been incorporated into the WSA and the EIS to reflect changes to projects in the cumulative scenario.

F001-196 The Applicant reiterates comment 195, and again requests recalculation of the WSA projections. The Applicant also states that in Table 4.20-5, Desert Sunlight construction water may be accounted for in both the “Total Outflow” and the “Balance” columns, and that this quantity should only be accounted for in one column.

Construction water requirements associated with the Desert Sunlight Project were incorrectly accounted for twice — once in the safe yield estimates, and once in the cumulative water balance calculations. Table 4.20-5 has been revised so that Desert Sunlight construction water is not accounted for in the cumulative balance because it is already accounted for in the safe yield estimate. A new footnote has been added to describe this approach. Values have been updated throughout the sections to reflect these corrections.

F001-197 The commenter requests that BLM revise the following clause from the first paragraph of page 4.20-46 to reflect the Applicant comments F001-188 through F001-192 by stating that groundwater pumping associated with the proposed project or an alternative would be "proportionately curtailed" rather than "subsequently ceased."

Consistent with revisions to MM WAT-2 and MM WAT-3 in the Final EIS, the commenter's recommendations have not been incorporated into the Final EIS. No changes have been made to the document.

F001-208 The Applicant appends the Desert Sunlight "Accounting Surface Technical Memorandum," which was included as Appendix O to the Desert Sunlight Solar Farm EIS.

The Applicant does not provide further comment on this document beyond previous statements that are addressed in the responses to Comments F001-72, -73, and -186. See responses to Comments F001-72, -73, and -186.